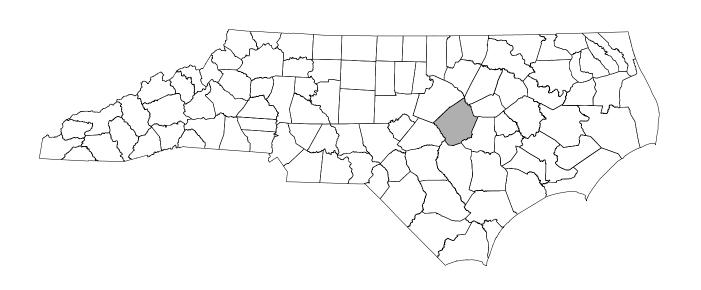
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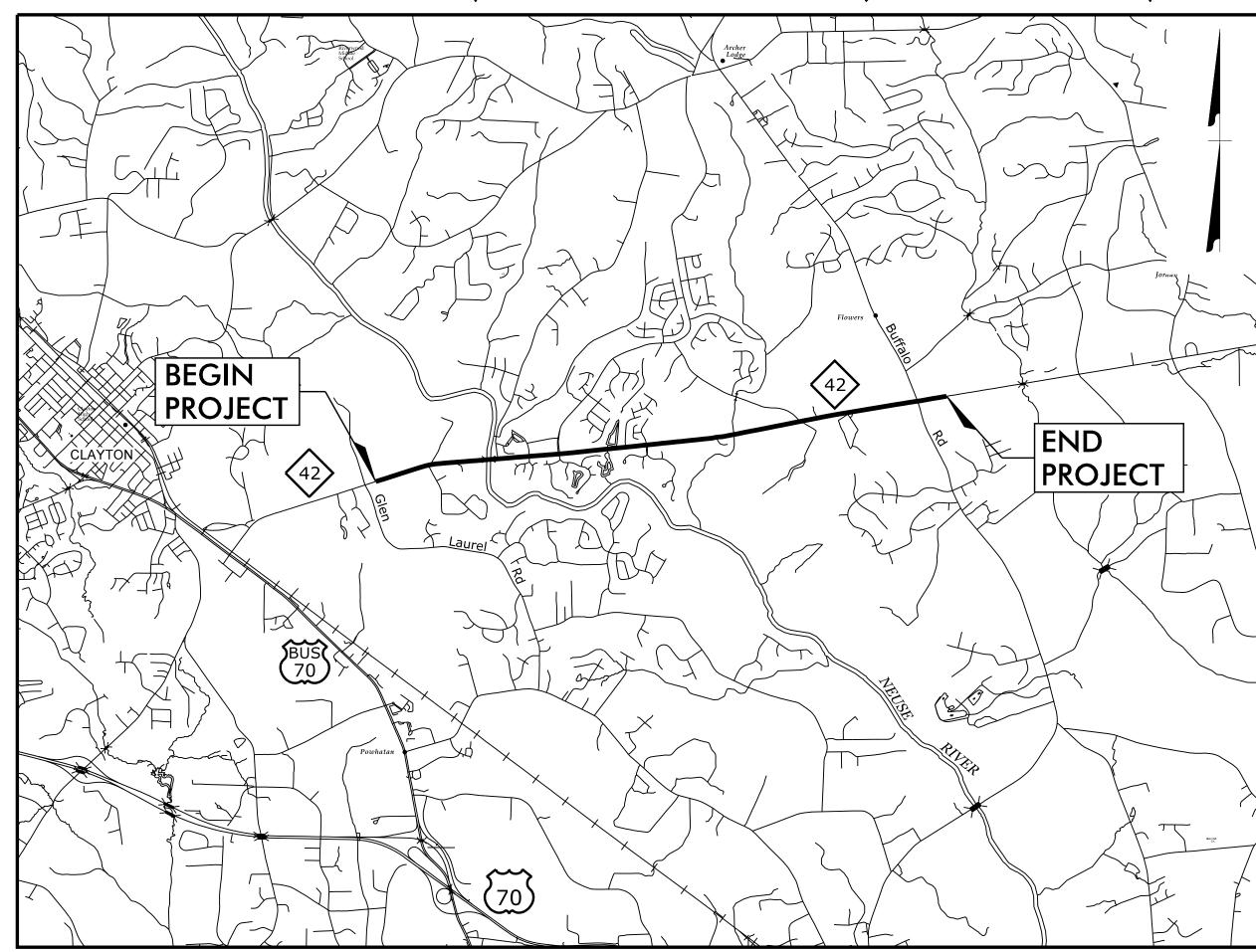
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# TRANSPORTATION MANAGEMENT PLAN

# JOHNSTON COUNTY



LOCATION: NC 42 FROM SR 1902 (GLEN LAUREL RD) TO SR 1003 (BUFFALO RD)



WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

STATE TRAFFIC MANAGEMENT ENGINEER

MATT SPRINGER, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

SPENCER JENNINGS TRAFFIC CONTROL DESIGN ENGINEER



# INDEX OF SHEETS

SHEET NO.

TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND TMP-1A

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES) TMP-1B & TMP-1C

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING TMP-2

TITLE

LOCATIONS

TMP-2A TEMPORARY SHORING NOTES

TMP-2B THRU TMP-2J CUT SECTIONS

TMP-2K THRU TMP-2N SPECIAL SIGN DESIGNS

TEMPORARY STEEL COVER OVER DRAINAGE STRUCTURE

TMP-3 & TMP-3A TEMPORARY TRAFFIC CONTROL PHASING

TEMPORARY TRAFFIC CONTROL PHASE I DETAILS TMP-45 THRU TMP-62C TEMPORARY TRAFFIC CONTROL PHASE II DETAILS

TMP-63 THRU TMP-82 TEMPORARY TRAFFIC CONTROL PHASE III DETAILS

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

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BRANDON SCOTT TRAFFIC CONTROL PROJECT DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: Michelle Ward

DATE: 8/19/2018

SEAL



JOE HUMMER, P.E. STEVE KITE, P.E.

TRAFFIC CONTROL PROJECT ENGINEER

SHEET NO.

STD. NO.

1101.01

1101.02

1101.03

1101.04

1101.05

1101.11

1110.01

1110.02

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1135.01

1145.01

1150.01

1160.01

1165.01

1170.01 1180.01

1205.01

1205.02

1205.04

1205.05

1205.07

1205.08

1205.09

1205.10

1205.12

1250.01

1251.01

1253.01

1261.01

1261.02

1262.01

1264.01

1264.02

ARE CONSIDERED A PART OF THESE PLANS:

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -

TITLE

TEMPORARY LANE CLOSURES

TEMPORARY ROAD CLOSURES

TEMPORARY SHOULDER CLOSURES

TRAFFIC CONTROL DESIGN TABLES

TEMPORARY CRASH CUSHION - REFLECTIVE END TREATMENT

PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS

POSITIVE PROTECTION - PORTABLE CONCRETE BARRIER

TRUCK MOUNTED ATTENUATOR - DELINEATION

PAVEMENT MARKINGS - INTERSECTIONS

PAVEMENT MARKINGS - PAINTED ISLANDS

SNOWPLOWABLE RAISED PAVEMENT MARKERS

GUARDRAIL AND BARRIER DELINEATOR SPACING

GUARDRAIL AND BARRIER DELINEATOR TYPES

PAVEMENT MARKINGS - SCHOOL AREAS

PAVEMENT MARKINGS - BRIDGES

GUARDRAIL END DELINEATION

PLACEMENT OF OBJECT MARKERS

OBJECT MARKERS

PAVEMENT MARKER SPACING

PAVEMENT MARKINGS - TURN LANES

PAVEMENT MARKINGS - LINE TYPES AND OFFSETS

PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS

PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES

RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

WORK ZONE VEHICLE ACCESSES

STATIONARY WORK ZONE SIGNS

PORTABLE WORK ZONE SIGNS

FLASHING ARROW BOARDS

BARRICADES - TYPE III

FLAGGING DEVICES

SKINNY-DRUM

DRUM

CONES

WORK ZONE ADVANCE WARNING SIGNS

PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY

SHEET NO. TMP-1A

PROJ. REFERENCE NO.

R-3825B

# **LEGEND**

## **GENERAL**

DIRECTION OF TRAFFIC FLOW

DIRECTION OF PEDESTRIAN TRAFFIC FLOW

----- EXIST. PVMT.

NORTH ARROW

—— PROPOSED PVMT.

TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

ONGOING CONSTRUCTION

TEMPORARY PAVEMENT

WEDGING

REMOVAL

#### SIGNALS







#### PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

#### TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III) 

DRUM 

SKINNY DRUM 

TUBULAR MARKER

TEMPORARY CRASH CUSHION FLASHING ARROW BOARD

FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

#### TEMPORARY SIGNING

PORTABLE SIGN

— STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKERS

CRYSTAL/CRYSTAL

CRYSTAL/RED

YELLOW/YELLOW

#### PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

### TEMPORARY PAVEMENT MARKING

- (CA) TYPE IV REMOVABLE TAPE 4" WHITE EDGELINE
- (CB) TYPE IV REMOVABLE TAPE 4" YELLOW EDGELINE
- (CD) TYPE IV REMOVABLE TAPE 4" 3'-9'/SP. WHITE MINI-SKIP
- (CE) TYPE IV REMOVABLE TAPE 4" WHITE SOLID LANE LINE
- (CI) TYPE IV REMOVABLE TAPE 4" YELLOW DOUBLE CENTER
- (DA) TYPE IV REMOVABLE TAPE LEFT TURN ARROW
- (DC) TYPE IV REMOVABLE TAPE STRAIGHT ARROW

- (P2) PAINT 24" WHITE STOPBAR
- (P8) PAINT 4" 2'-6'/SP. WHITE MINI-SKIP
- (P9) PAINT 4" 2'-6'/SP. YELLOW MINI-SKIP
- (P13) PAINT 8" 3'-9'/SP. WHITE MINI-SKIP
- (PA) PAINT 4" WHITE EDGELINE
- (PB) PAINT 4" YELLOW EDGELINE
- (PC) PAINT 4" 10'-30'/SP. WHITE SKIP
- (PD) PAINT 4'' 3'-9'/SP. WHITE MINI-SKIP
- PE) PAINT 4" WHITE SOLID LANE LINE
- (PI) PAINT 4" YELLOW DOUBLE CENTER

(PN) PAINT 8" WHITE GORELINE

- (PP) PAINT 8" YELLOW DIAGONAL
- (PR) PAINT 8" WHITE SOLID LANE LINE
- (QA) PAINT LEFT TURN ARROW
- (QB) PAINT RIGHT TURN ARROW
- (QC) PAINT STRAIGHT ARROW
- PAINT COMBO LEFT-STRAIGHT ARROW
- (QE) PAINT COMBO RIGHT-STRAIGHT ARROW
- (QI) PAINT ALPHANUMERIC CHARACTER
- (QP) PAINT MERGE ARROW
- (QT) PAINT U-TURN ARROW

APPROVED: Miduelle Ward DATE: 6/6/2018

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED** 

ROADWAY STANDARD DRAWINGS & LEGEND

MANAGEMENT STRATEGIES

#### -L- (NC 42)

IN PHASE 1 - STEP 1, TRAFFIC IS MAINTAINED ON EXISTING TRAVEL LANES AND CONSTRUCTION MAY BEGIN ON THE LEFT, RIGHT, OR BOTH SIDES OF THE ROAD, INCLUDING TEMPORARY PAVEMENT NEEDED FOR INTERIM TRAFFIC SHIFTS IN PHASE 1 STAGE 1 OF THE CULVERT AT -L- STA. 167+00 AND STAGE 1 OF THE BRIDGE OVER THE NEUSE RIVER. WEDGING OVER EXISTING PAVEMENT WILL BE REQUIRED IN SEVERAL AREAS IN ORDER TO MAINTAIN TRAFFIC.

IN PHASE 1 - STEP 2, TRAFFIC IS SHIFTED LEFT ONTO NEW AND TEMPORARY PAVEMENT TO CONSTRUCT THE RIGHT SIDE OF THE ROADWAY FROM THE BEGINNING OF THE PROJECT THROUGH -Y12A- (FLOWERS PKWY), INCLUDING STAGE 1 OF THE CULVERT AT -L- STA. 114+15. WEDGING AND WIDENING OPERATIONS CONTINUE ON BOTH SIDES OF THE ROAD FROM -Y12A- (FLOWERS PKWY) THROUGH THE END OF THE PROJECT, INCLUDING -Y13- (BUFFALO RD).

DURING PHASE 1, ALL WORK ALONG -L- FROM PROJECT BEGIN TO APPROXIMATELY -L- STA. 35+50 +/- IS COMPLETED DURING A 180 DAY ICT IN ORDER TO OPEN ALL 4 LANES TO TRAFFIC IN THIS AREA. (SEE PLANS FOR PHASE/STEP THAT CONSTRUCTION OCCURS)

IN PHASE 2, TRAFFIC IS SHIFTED RIGHT ONTO NEW PAVEMENT. DURING THIS PHASE, THE REMAINDER OF THE LEFT SIDE OF ROADWAY. STAGE 2 OF THE CULVERT AT -L- STA. 114+15 +/-, STAGE 2 OF THE CULVERT AT -L- STA. 167+00 +/-, STAGE 2 OF THE BRIDGE OVER THE NEUSE RIVER (INCLUDING CLOSURE POUR) AND THE WEDGING AND WIDENING FROM -Y12A- (FLOWERS PKWY) THROUGH THE END OF THE PROJECT, INCLUDING -Y13- (BUFFALO RD) WILL BE COMPLETED.

IN PHASE 3, TRAFFIC IS SPLIT TO THE OUTSIDE TO ALLOW THE MEDIAN ISLANDS TO BE CONSTRUCTED.

ONCE ALL WORK IS COMPLETE, THE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS & MARKERS WILL BE PLACED.

#### -Y- LINES

TRAFFIC ON -Y4- & -Y5- IS MAINTAINED IN EXISTING LANES WHILE TEMPORARY ALIGNMENTS ARE CONSTRUCTED ADJACENT TO THEIR CORRESPONDING -Y- LINES. ONCE THESE ALIGNMENTS ARE COMPLETE, TRAFFIC IS SHIFTED TO THE TEMPORARY PAVEMENT AND -Y4- & -Y5- CAN BE COMPLETELY REBUILT AWAY FROM TRAFFIC.

-Y6-, -Y8-, -Y10-, -Y10B-, -Y10C-, -Y11-, -Y11C-, -Y12-, -Y13-, & -DR1-WILL ALL BE CONSTRUCTED USING LANE CLOSURES AND MAINTAINING TRAFFIC IN THE EXISTING PATTERN.

-Y10A- WILL BE CLOSED FOR CONSTRUCTION AND DETOURED VIA -Y9-.

-Y11A- WILL BE CLOSED FOR CONSTRUCTION AND DETOURED VIA VERONA DRIVE.

-Y11B- WILL BE CLOSED FOR CONSTRUCTION AND DETOURED VIA TUSCAN RIDGE ROAD. VERONA DRIVE WILL BE CONSTRUCTED IN PHASE 2 ONCE TUSCAN RIDGE ROAD HAS BEEN COMPLETED AND RE-OPENED TO TRAFFIC.

## GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

#### TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS -L- (NC 42) MONDAY - SUNDAY -Y13- (BUFFALO RD) 6:00 A.M. - 8:00 P.M. MONDAY - FRIDAY -Y6- (CASTLEBERRY RD) & -Y7- (E SCHOOL RD) 7:00 A.M. - 9:00 A.M. &

B) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

-Y7- (E SCHOOL RD) MONDAY - FRIDAY 7:00 A.M. - 5:00 P.M. AND

ANY OTHER TIME SCHOOL IS IN SESSION

C) DO NOT STOP TRAFFIC AS FOLLOWS:

DAY AND TIME RESTRICTIONS ROAD NAME

DURATION AND OPERATION

-L- (NC 42) MONDAY - SUNDAY: 4:00 A.M. - 12:00 A.M.

30 MINUTES FOR BRIDGE WORK & SIGNAL MAST ARM INSTALLATION

NOTIFY FIRE DEPARTMENT AND EMERGENCY MANAGEMENT SERVICES DURING THESE OPERATIONS, AS DIRECTED BY THE ENGINEER.

2:00 P.M. - 5:00 P.M.

D) DO NOT CONDUCT SINGLE VEHICLE HAULING & MATERIAL DELIVERY AS FOLLOWS:

(MIDNIGHT)

ROAD NAME DAY AND TIME RESTRICTIONS

ALL ROADS MONDAY - FRIDAY:

6:00 A.M. - 9:00 A.M. 2:00 P.M. - 8:00 P.M.

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS:

DAY AND TIME RESTRICTIONS ROAD NAME

ALL ROADS MONDAY - FRIDAY: 6:00 A.M. - 8:00 P.M.

DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER. PROJ. REFERENCE NO. SHEET NO. TMP-1B R-3825B

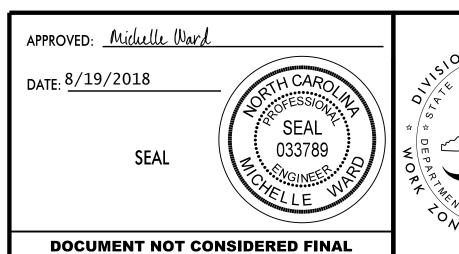
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#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- G) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE. CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- J) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- K) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- L) DO NOT INSTALL MORE THAN ONE MILE OF LANE CLOSURE ON NC 42 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- M) DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON NC 42.
- N) PROVIDE A MINIMUM OF 1 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE
- O) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.



**UNLESS ALL SIGNATURES COMPLETED** 

TRANSPORTATION **OPERATIONS** PLAN

## GENERAL NOTES

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

P) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

Q) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

#### TRAFFIC PATTERN ALTERATIONS

R) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

#### SIGNING

- S) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- T) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- U) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- V) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- W) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

#### TRAFFIC BARRIER

X) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

Y) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

#### TRAFFIC CONTROL DEVICES

- Z) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- AA) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- BB) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, SKINNY DRUMS OR CONES) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

#### PAVEMENT MARKINGS AND MARKERS

CC) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
-L- (NC 42) & -Y13- (BUFFALO RD)	PAINT (ASPHALT) COLD APPLIED PLASTIC, TYPE IV (CONCRETE)	TEMPORARY RAISED
ALL OTHER ROADS	PAINT (IF ROAD IS CURRENTLY STRIPED)	TEMPORARY RAISED (IF EXISTING MARKERS ARE PRESENT)

- DD) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- EE) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- FF) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- GG) TRACE THE EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE DRUMS TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION.

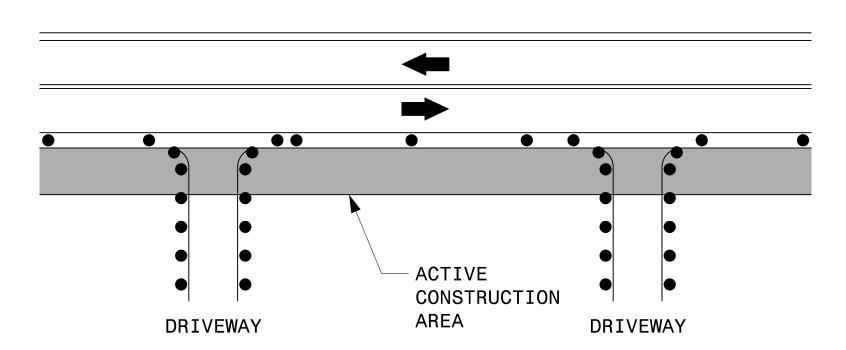
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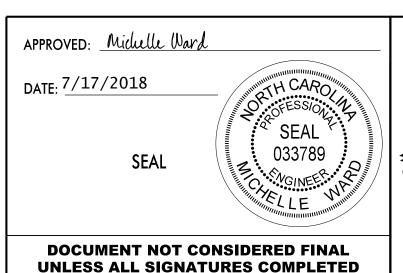
#### MISCELLANEOUS

- HH) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- II) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE PAVEMENT ENDS" SIGNS (W8-3) 500 FT AND 250 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF THE ROADWAY ALONG UNPAVED AREAS. ALLOWABLE ROADS TO USE LOOSE GRAVEL WILL BE DETERMINED BY THE ENGINEER.
- JJ) PLACE DRUMS ALONG ALL DRIVEWAYS TO PREVENT TRAFFIC FROM ENTERING ACTIVE CONSTRUCTION AREAS.

#### DRUM PLACEMENT ALONG DRIVEWAYS TYPICAL



KK) INSTALL TEMPORARY STOP SIGNS (R1-1) AND STOP AHEAD SIGNS (W3-1A) AT ALL UNSIGNALIZED -Y- LINES WHEN SHIFTING -Y- LINE ALIGNMENT OR -L-LINE TRAFFIC PATTERNS. SEE RSD 1101.11, SHEET 4 OF 4 FOR ADVANCE WARNING SIGN SPACING CHART.





TRANSPORTATION **OPERATIONS** PLAN

CLEAR DISTANCE 2 FT MIN. **EDGE OF** PAVEMENT **OF WALL** EDGE OF NEAREST PAVEMENT SECTION PAVEMENT SECTION NEAREST TRAFFIC TRAFFIC A: TOP OF SHORING = REINFORCED EDGE OF PAVEMENT ZONE **B: BOTTOM OF SHORING** REINFORCEMENT BOTTOM OF EXCAVATION OR EXISTING GRADE **FINISHED** GRADE BOTTOM OF WALL REINFORCED ZONE NOTE: WALL OR SHORING HEIGHT = A - B

# FIGURE A

## **NOTES**

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.
- 9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

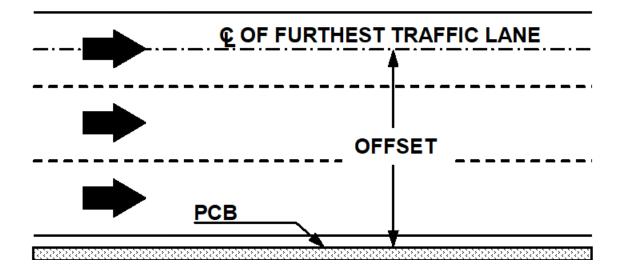
PROJ. REFERENCE NO.	SHEET NO.
R-3825B	TMP-2

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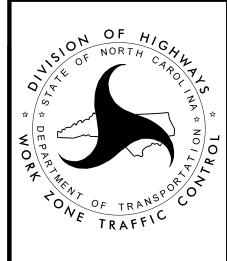
MINIMUM	REQUIRED	CLEAR	DISTANCE.	inche
	KLQCIKLD		DISTANCES	, inche

Barrier	Pavement	Offset *		De	sign Spe	ed, mph					
Type	Type	ft	<30	31-40	41-50	51-60	61-70	71-80			
		<8	24	26	29	32	36	40			
		8-14	26	28	31	35	38	42			
		14-20	27	29	34	36	39	43			
		20-26	28	31	35	38	40	44			
	Asphalt	26-32	29	32	36	39	42	45			
		32-38	30	34	38	41	43	46			
<b>8</b>		38-44	31	34	41	43	45	48			
PCB		44-50	31	35	41	43	46	49			
7		50-56	32	36	42	44	47	50			
re		>56	32	36	42	45	47	51			
Unanchored		<8	17	18	21	22	25	26			
nc		8-14	19	20	23	25	26	29			
n a		14-20	22	22	24	26	28	31			
)		20-26	23	24	26	27	30	34			
	Concrete	26-32	24	25	27	28	32	35			
		32-38	24	26	27	30	33	36			
		38-44	25	26	28	30	34	37			
		44-50	26	26	28	32	35	37			
		50-56	26	26	28	32	35	38			
		>56	26	27	29	32	36	38			
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds								
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds								

<sup>\*</sup> See Figure Below



# FIGURE B



PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

#### SHORING LOCATION NO. 1

DESIGN TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 7.9 FT LEFT TO STATION -L- 62+80 +/-, 7.9 FT LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 138 FT +/-

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 7.9 FT LEFT TO STATION -L- 62+80 +/-, 7.9 FT LEFT MAY NOT PENETRATE BELOW ELEVATION 126.0 FT DUE TO OBSTRUCTIONS. VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 7.9 FT LEFT TO STATION -L- 62+80 +/-, 7.9 FT LEFT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 7.9 FT LEFT TO STATION -L- 62+80 +/-, 7.9 FT LEFT. SEE STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

#### SHORING LOCATION NO. 2

DESIGN TEMPORARY SHORING FROM STATION -L- 65+65 +/-, 7.7 FT LEFT TO STATION -L- 66+33 +/-, 7.7 FT LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 142 FT +/-

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- 65+65 +/-, 7.7 FT LEFT TO STATION -L- 66+33 +/-, 7.7 FT LEFT MAY NOT PENETRATE BELOW ELEVATION 132.0 FT DUE TO OBSTRUCTIONS. VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 65+65 +/-, 7.7 FT LEFT TO STATION -L- 66+33 +/-. 7.7 FT LEFT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 65+65 +/-, 7.7 FT LEFT TO STATION -L- 66+33 +/-, 7.7 FT LEFT. SEE STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

#### SHORING LOCATION NO. 3

DESIGN TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 0.0 FT LEFT TO STATION -L- 62+33 +/-, 0.0 FT LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 138 FT +/-

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 0.0 FT LEFT TO STATION -L- 62+33 +/-, 0.0 FT LEFT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 62+07 +/-, 0.0 FT LEFT TO STATION -L- 62+33 +/-, 0.0 FT LEFT. SEE GEOTECHNICAL STANDARD DETAIL NO 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

PROJ. REFERENCE NO. SHEET NO. TMP - 2A

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#### SHORING LOCATION NO. 4

DESIGN TEMPORARY SHORING FROM STATION -L- 66+08 +/-, 4.0 FT LEFT TO STATION -L- 66+33 +/-, 4.0 FT LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 142 FT +/-

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 66+08 +/-, 4.0 FT LEFT TO STATION -L- 66+33 +/-, 4.0 FT LEFT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 66+08 +/-, 4.0 FT LEFT TO STATION -L- 66+33 +/-, 4.0 FT LEFT. SEE GEOTECHNICAL STANDARD DETAIL NO 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

#### SHORING LOCATION NO. 5

DESIGN TEMPORARY SHORING FROM STATION -L- 114+05 +/-, 39.0 FT LEFT TO STATION -L- 114+30 +/-, 39.0 FT LEFT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 158 FT +/-

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 114+05 +/-, 39.0 FT LEFT TO STATION -L- 114+30 +/-, 39.0 FT LEFT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 114+05 +/-, 39.0 FT LEFT TO STATION -L- 114+30 +/-, 39.0 FT LEFT. SEE GEOTECHNICAL STANDARD DETAIL NO 1801.02 FOR STANDARD TEMPORARY WALLS.

#### SHORING LOCATION NO. 6

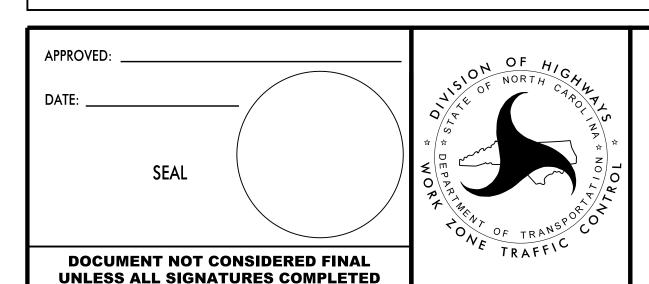
DESIGN TEMPORARY SHORING FROM STATION -L- 166+25 +/-, 4.5 FT RIGHT TO STATION -L- 167+75 +/-, 4.5 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 LB/CF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = 148 FT +/-

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 166+25 +/-, 4.5 FT RIGHT TO STATION -L- 167+75 +/-, 4.5 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 166+25 +/-, 4.5 FT RIGHT TO STATION -L- 167+75 +/-, 4.5 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO 1801.02 FOR STANDARD TEMPORARY WALLS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC SECTION ON 12/14/2017 AND SEALED BY A PROFESSIONAL ENGINEER, JINYOUNG PARK, LICENSE # 032171.

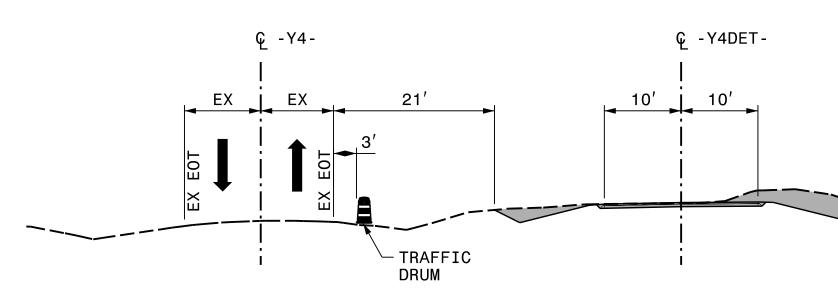


TEMPORARY SHORING NOTES

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-2C

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

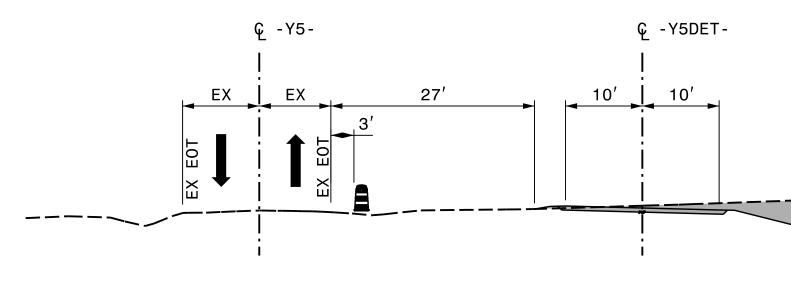
SECTION D-D -Y5- STA. 13+00



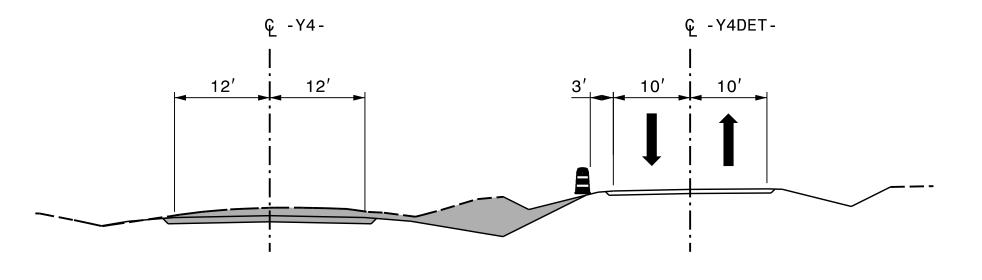
PHASE 1- STEP 1

SECTION C-C

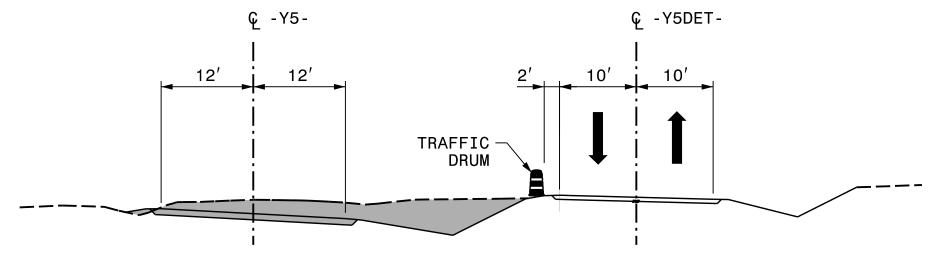
-Y4- STA. 12+00



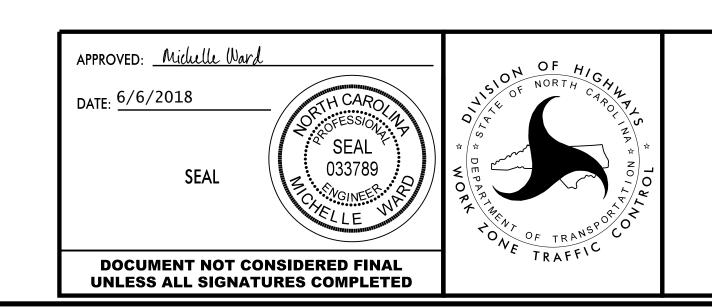
PHASE 1 - STEP 1



PHASE 1- STEP 2



PHASE 1 - STEP 2A

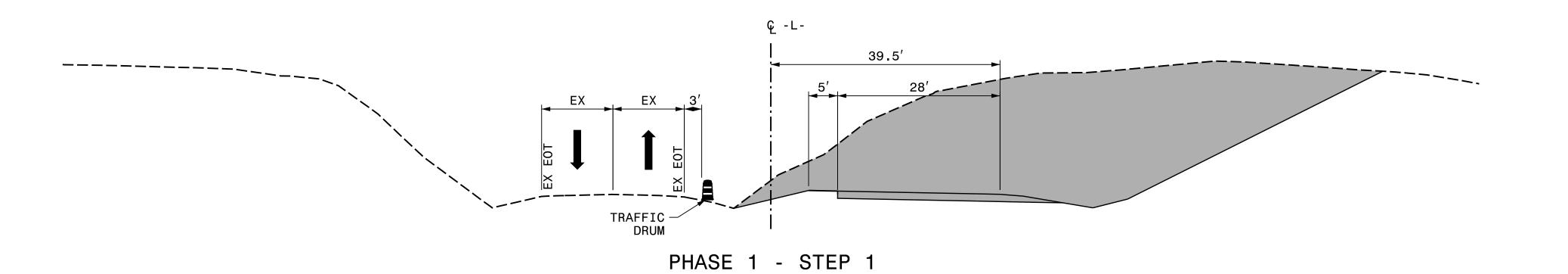


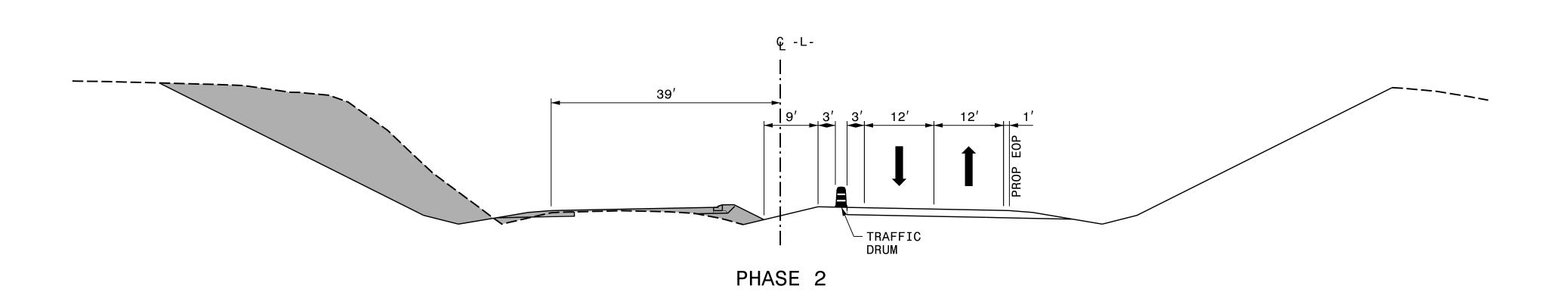
CUT SECTIONS

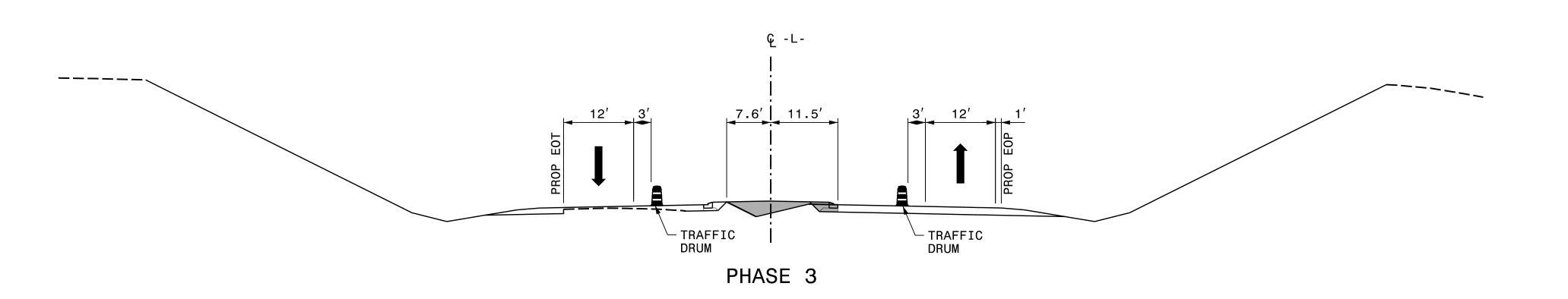
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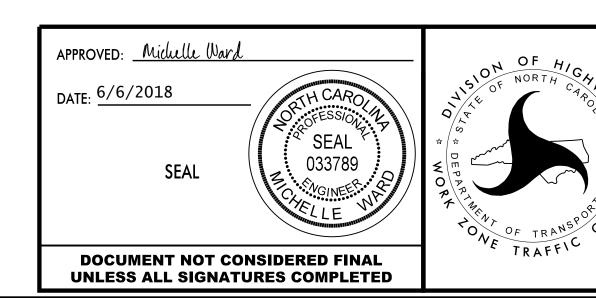
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

SECTION E-E -L- STA. 54+00









CUT SECTIONS

USER: BSCOTT DATE: 6/5/2018 TIME: 3:14:42 PM FILE: pw:\\pwhdruseas01:HDR\_US\_East\_01\Documents\3322\10001376\100512

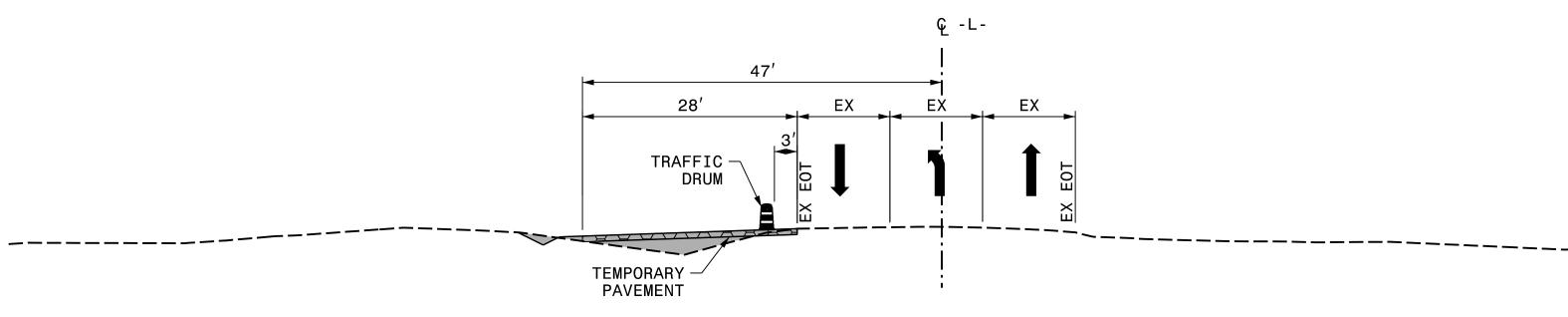
SECTION J-J

-L- STA. 101+50

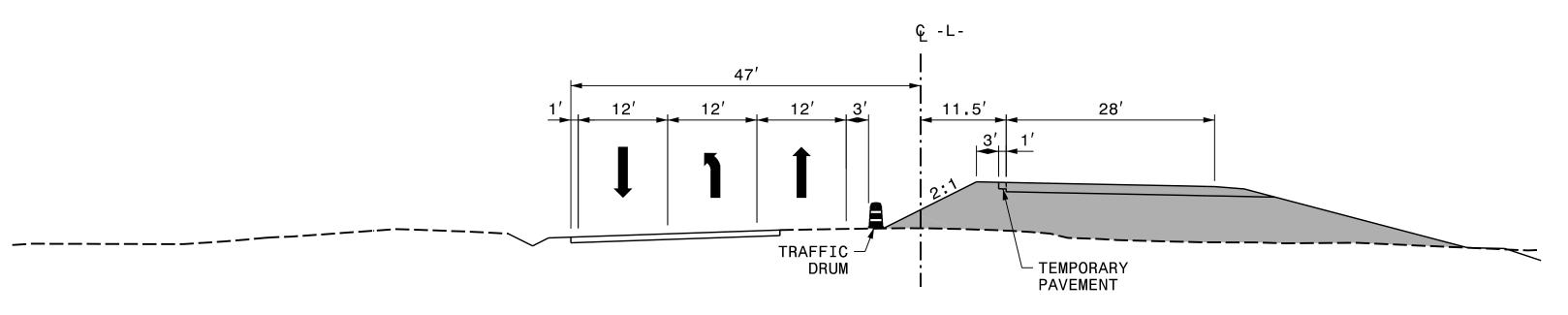
PROJ. REFERENCE NO. SHEET NO.

R-3825B TMP-2G

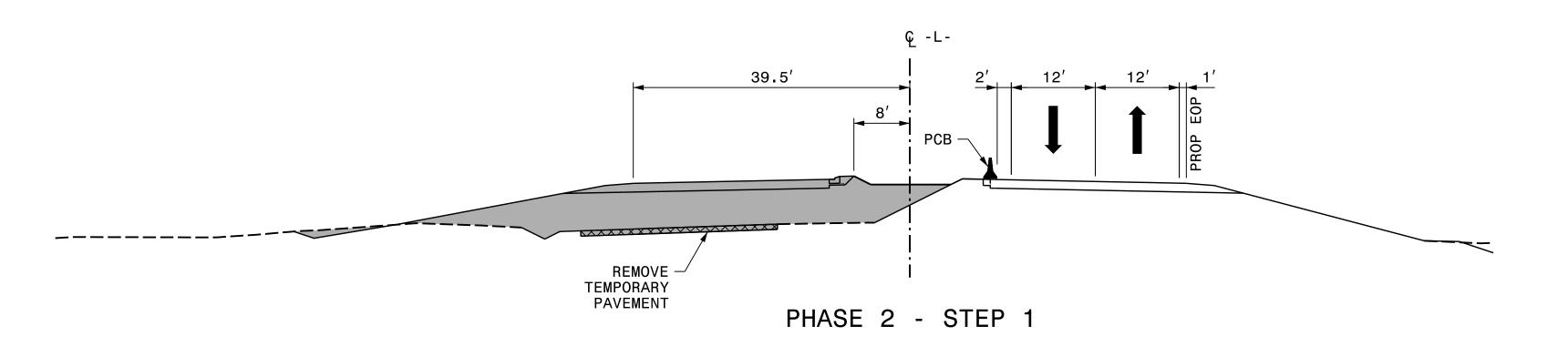
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

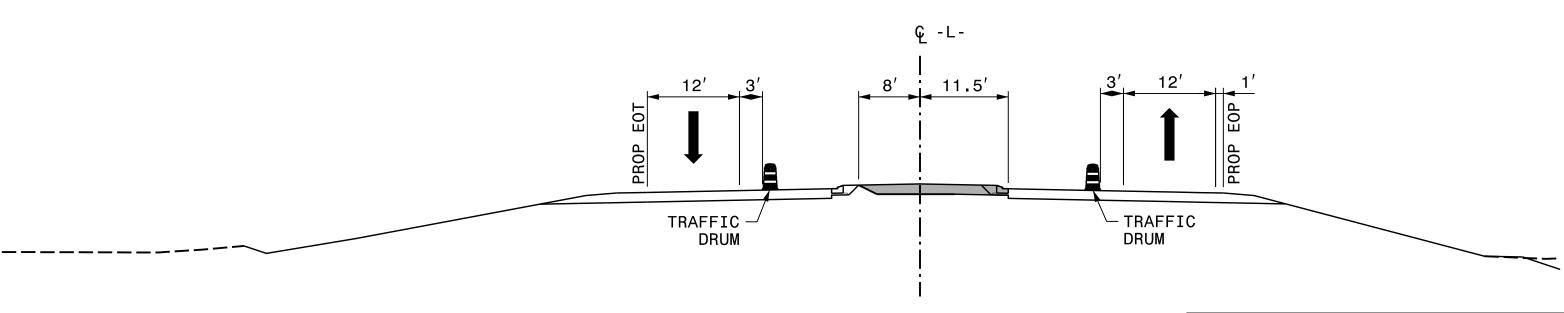


PHASE 1 - STEP 1

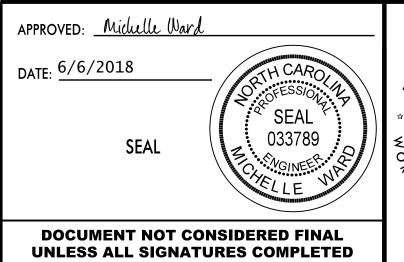


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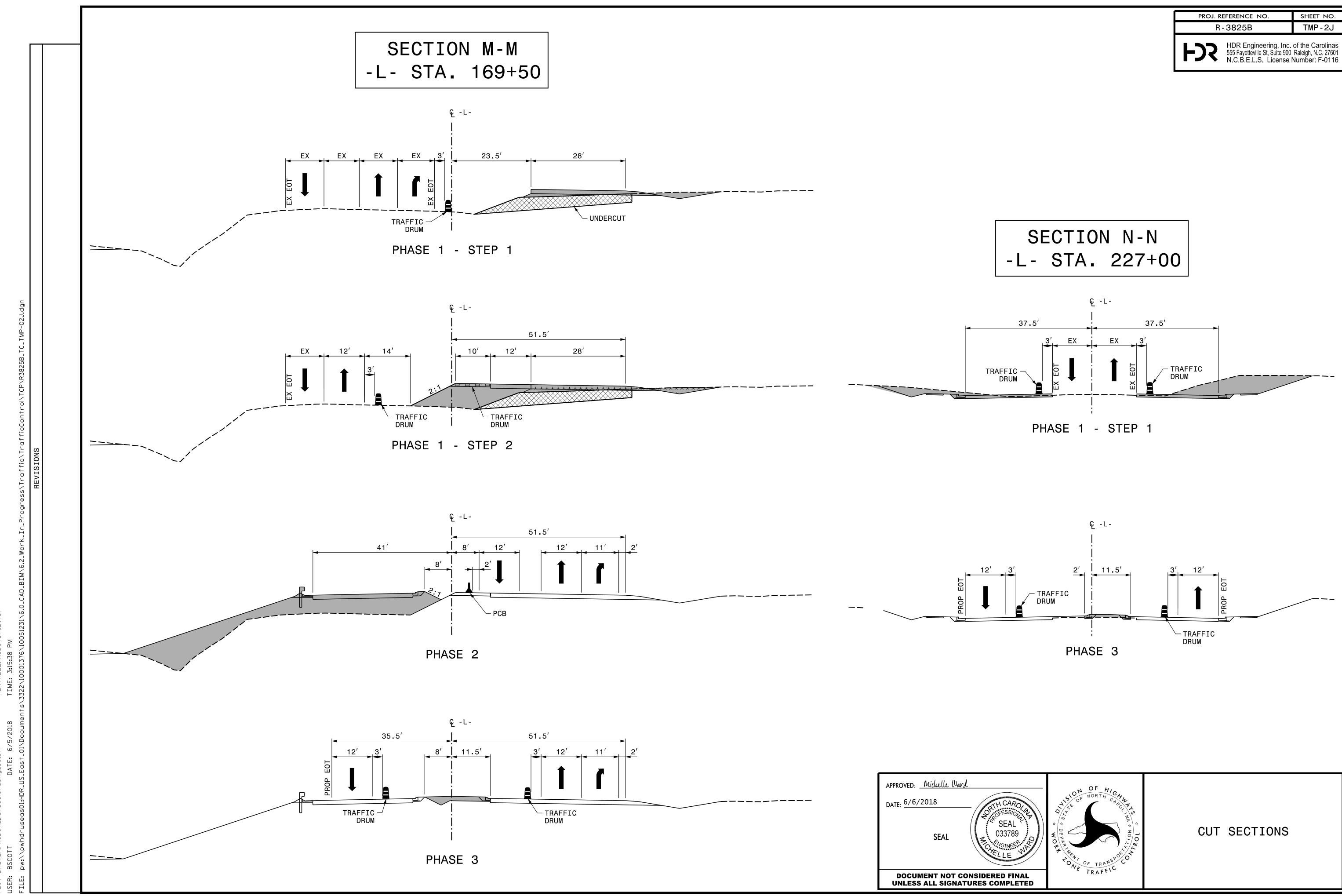




PHASE 3



CUT SECTIONS



PROJ. REFERENCE NO. SHEET NO. TMP - 2K

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

BACKG COLOR: Fluorescent Orange SIGN NUMBER: SP-01 DESIGN BY:CHRIS HARNDEN Aug 18, 2017 CHECKED BY:RON KING COPY COLOR: **Black** TYPE: STATIONARY PROJECT ID: R-3825B DIV: 4 QUANTITY: SEE PLANS X Y WID HT SIGN WIDTH: 2'-6" **HEIGHT:** 2'-6" TOTAL AREA: 6.3 Sq.Ft. 2.9" BORDER TYPE: INSET RECESS: 0.5" 6"C WIDTH: 0.75" RADII: 1.88" MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS: 6"C LENGTH: 30" **√**3.1″ USE NOTES: 1,2 6"C 1 Legend and border shall be direct applied black non-reflective sheeting. 2.9" Background shall be NC GRADE B fluorescent orange retroreflective sheeting. **BORDER** 20.6" R=1.88" TH=0.75" IN=0.5''

LETTER POSITIONS Series/Size Letter spacings are to start of next letter Text Length C 2000 N E U S E 4.7 4.7 4.1 4.4 4.4 3.1 4.7 20.6 R I V E R C 2000 6 4.4 1.7 4.6 4.1 3.4 6 18.1 C 2000 P K W Y 6.4 4.6 3.9 4.9 3.8 6.4 17.2 FILENAME: R3825B\_TC\_TMP-02J NORTH CAROLINA D.O.T. SIGN DETAIL

DATE: 6/6/2018

SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Spacing Factor is 1 unless specified otherwise

OF HIGH CAROLINA OF TRAFFIC

SPECIAL SIGN DESIGN NEUSE RIVER PKWY

SHEET NO. PROJ. REFERENCE NO. R-3825B TMP-2L

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

BACKG COLOR: Fluorescent Orange SIGN NUMBER: SP-02 DESIGN BY:CHRIS HARNDEN Aug 18, 2017 CHECKED BY:RON KING COPY COLOR: **Black** TYPE: STATIONARY PROJECT ID: R-3825B DIV: 4 QUANTITY: SEE PLANS SYMBOL X Y WID HT SIGN WIDTH: 3'-0" **HEIGHT:** 2'-0" TOTAL AREA: 6.0 Sq.Ft. 36" BORDER TYPE: INSET **RECESS:** 0.38" WIDTH: 0.63" **RADII:** 1.5" MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS: 24" LENGTH: 6"C USE NOTES: 1,2 Legend and border shall be direct applied black non-reflective sheeting. 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting. 3.55" 3.55" **BORDER** 28.9" R=1.5" TH=0.63" IN=0.38" Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS Series/Size Letter spacings are to start of next letter Text Length F L O W E R S C 2000 3.6 3.9 3.8 4.3 5.4 4.1 4.1 3.4 3.6 28.9 P K W Y C 2000 9.4 4.6 3.9 4.9 3.8 9.4 17.2 FILENAME: R3825B\_TC\_TMP-02K NORTH CAROLINA D.O.T. SIGN DETAIL

> APPROVED: Kon king DATE: <u>6/6/2018</u> DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SPECIAL SIGN DESIGN FLOWERS PKWY

PENTABLE: NCDOT\_tcp.tbl TIME: 3:15:55 PM hts\3322\10001376\10051231\6.0

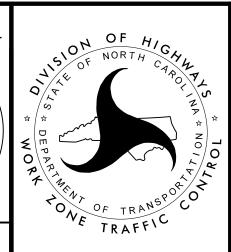
PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-2M

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

BACKG COLOR: Fluorescent Orange SIGN NUMBER: SP-03 DESIGN BY: CHRIS HARNDEN CHECKED BY:RON KING Apr 30, 2018 COPY COLOR: Black TYPE: STATIONARY PROJECT ID: R-3825B DIV: 4 QUANTITY: SEE PLANS SYMBOL X Y WID HT SIGN WIDTH: 3'-6" **HEIGHT:** 2'-0" TOTAL AREA: 7.0 Sq.Ft. 42" BORDER TYPE: INSET **RECESS:** 0.38" 3.75" WIDTH: 0.63" **RADII:** 1.5" MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS: 24" 44.5" LENGTH: 6"D USE NOTES: 1,2 3.75" Legend and border shall be direct applied black non-reflective sheeting. Background shall be NC GRADE B fluorescent orange retroreflective sheeting. 4.7" 4.7" **BORDER** 32.6" R=1.5''TH=0.63" IN=0.38" Spacing Factor is 1 unless specified otherwise LETTER POSITIONS

									Let	ter	spac	inas	s ar	e to	) Sta	art	ot nex	t lette	r			Series/Siz
							1				- p									 		Text Lengt
		Р	I	N	E	V	I	L	L	E												C 2000
4.	7 4	- 6	2.2	4.7	3.6	4.6	2.2	3.9	3.9	3.1	4.7											32.6
		В	L	٧	D																	D 2000
11.	. 6 5	5.1	4.1	5.5	4.1	11.6																18.7
																						_
																						-
																				<u> </u>		

APPROVED: Kon king DATE: 6/6/2018 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SPECIAL SIGN DESIGN VILLAGE BLVD

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-2N

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

SIGN NUMBER: SP-04 BACKG COLOR: Fluorescent Orange DESIGN BY:CHRIS HARNDEN CHECKED BY:RON KING Aug 18, 2017 COPY COLOR: Black TYPE: STATIONARY DIV: 4 PROJECT ID: R-3825B QUANTITY: SEE PLANS SYMBOL X Y WID HT SIGN WIDTH: 3'-0" **HEIGHT:** 3'-0" TOTAL AREA: 9.0 Sq.Ft. BORDER TYPE: INSET **RECESS:** 0.63" 6"C WIDTH: 0.88" RADII: 2.25" MAT'L: 0.080" (2.0 mm) ALUMINUM NO. Z BARS: 6"C LENGTH: USE NOTES: 1,2 6"C Legend and border shall be direct applied black non-reflective sheeting. Background shall be NC GRADE B fluorescent orange retroreflective sheeting. 5.1" **BORDER** 25.8" R=2.25" TH=0.88"

#### LETTER POSITIONS

								Let	ter	spacin	gs are	to st	art of	next 1	etter		Series/Si Text Leng
	E	Α	S	Т													C 2000
10.5	3.6	4.4	3.9	3.1	10.5												14.9
	S	С	Н	0	0	L											C 2000
5.1	4.3	4.6	4.6	4.6	4.7	3.1	5.1										25.8
	R	0	Α	D													C 2000
9.7	4.3	4.3	4.7	3.4	9.7												16.6

IN=0.63"

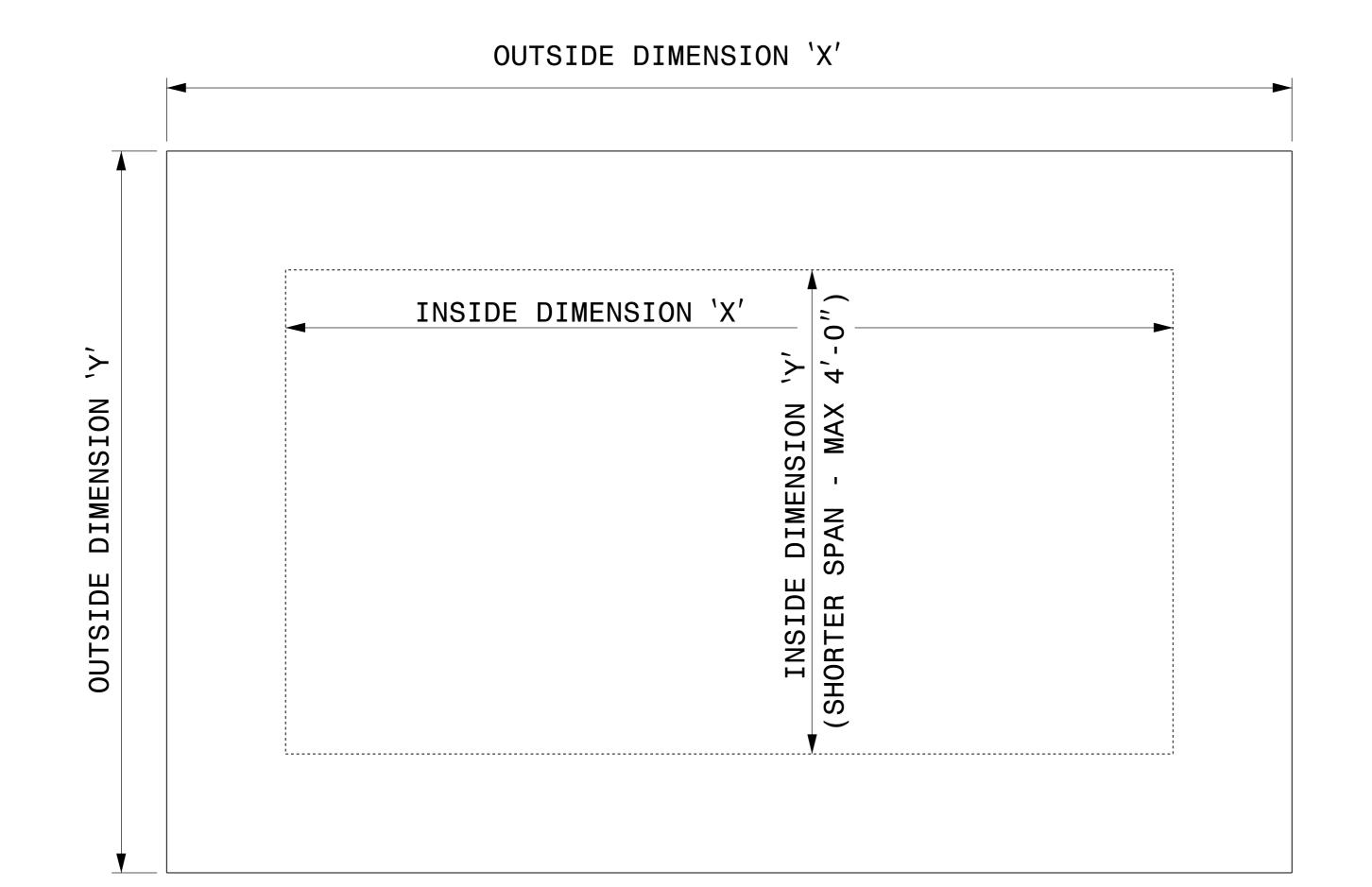
APPROVED: Kon king DATE: 6/6/2018 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Spacing Factor is 1 unless specified otherwise

SPECIAL SIGN DESIGN EAST SCHOOL RD

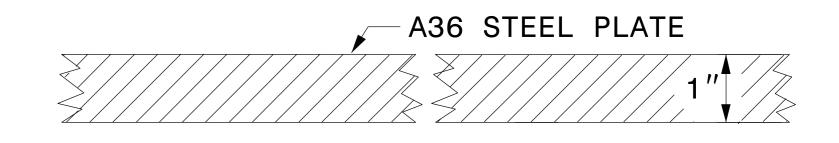
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PROJECT REFERENCE NO. SHEET NO. R-3825B TMP-20



## GENERAL NOTES:

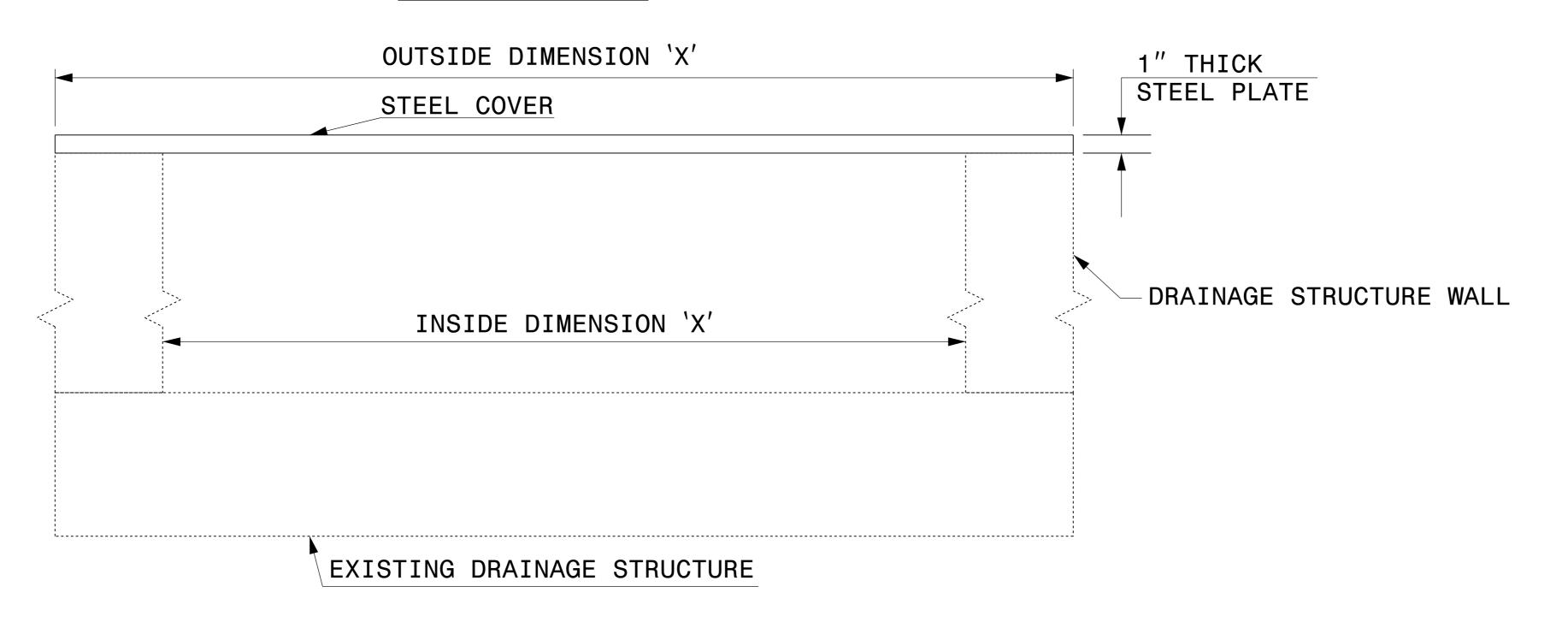
- -USE GRADE A36 STEEL
- -STEEL COVERS ARE FOR TEMPORARY USE DURING PHASE CONSTRUCTION.
- -FILL SHALL BE PLACED DIRECTLY OVER THE STEEL PLATES.
- -SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
- -QUANTITES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



# SECTION VIEW OF STEEL TOP PLATE

# PLAN VIEWS

ELEVATION VIEWS





DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119

DETAIL OF TEMPORARY

1" STEEL COVER

OVER DRAINAGE STRUCTURE

ORIGINAL BY: E.E. WARD DATE: 2-2-98

MODIFIED BY: DATE: CHECKED BY: DATE: FILE SPEC.: eric:/usr/details/metric/stand/stlcvr2.dgn

NOTES:

BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES, INSTALL ADVANCE WARNING SIGNS ON ALL ROADS, ACCORDING TO RSD 1101.01. FIELD VERIFY LOCATIONS WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

MAINTAIN ACCESS TO ALL RESIDENCES, SCHOOLS, BUS STOPS, EMERGENCY SERVICES, AND BUSINESSES AT ALL TIMES. PRIOR TO INCORPORATION, OBTAIN WRITTEN APPROVAL FROM THE ENGINEER ON METHOD TO MAINTAIN ACCESS.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE.

MAINTAIN EXISTING DRAINAGE DITCHES AS LONG AS POSSIBLE AND FIELD ADJUST TO TIE TO PROPOSED DRAINAGE TO EXISTING PIPES OR DITCHES.

IN AREAS WHERE DRAINAGE BOXES WILL BE LOCATED WITHIN TEMPORARY TRAFFIC LANES, LEAVE BOXES LOW, COVER WITH STEEL PLATE AND PAVE OVER BOX FOR TEMPORARY TRAFFIC PATTERNS. UNCOVER BOX, ADJUST HEIGHT AND PLACE GRATE LATER WHEN SHIFTING TO THE FINAL TRAFFIC PATTERN. (SEE DRAINAGE PLANS & DRAINAGE SUMMARY IN THE ROADWAY PLANS AND STEEL PLATE DETAIL IN THE TMP.

WHEN WEDGING OVER THE EXISTING PAVEMENT, WEDGE TO PROPOSED ELEVATION (LESS THE FINAL LAYER OF SURFACE COURSE), OR WEDGE AS NEEDED TO MAINTAIN TRAFFIC. MAINTAIN POSITIVE DRAINAGE AND MAINTAIN A MAXIMUM .04 ROLLOVER IN BOTH EXISTING AND/OR TEMPORARY TRAVEL LANES.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

WHEN USING LANE CLOSURES (RSD 1101.02), RETURN TRAFFIC TO EXISTING AND/OR CURRENT TEMPORARY TRAFFIC PATTERN UPON ACTIVITIES COMPLETION, UNLESS OTHERWISE NOTED IN THE PHASING.

WHEN PHASING STATES TO USE LANE CLOSURES, REFER TO THE FOLLOWING FOR ALL EXISTING AND PROPOSED ROADS:

- ALL TWO-LANE/TWO-WAY FACILITIES SEE RSD 1101.02, SHEET 1 OF 14
- ALL 3-LANE OR 5-LANE ROADWAYS SEE RSD 1101.02, SHEET 2 OF 14
- ALL MULTI-LANE FACILITIES POSTED < 60 MPH SEE RSD 1101.02, SHEET 3 OF 14

FOR ALL SHOULDER CLOSURES, SEE RSD 1101.04. WHEN PORTABLE CONCRETE BARRIER (PCB) IS PRESENT ON SHOULDERS. PLACE SHOULDER CLOSURE SIGNS IN ADVANCE OF PCB.

WHEN INSTALLING AND ACTIVATING TEMPORARY AND FINAL SIGNALS, USE LANE CLOSURES AS STATED ABOVE AND LAW ENFORCEMENT.

COMPLETE PAVING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE UNTIL STATED TO PLACE FINAL LAYER IN THE PHASING.

## PHASE 1 (SEE SHEETS TMP-4 THRU TMP-44)

COMPLETE THE WORK REQUIRED IN PHASE 1, STEPS 1-4 FROM PROJECT BEGIN TO -L- STA. 35+50 +/- (LT & RT) IN EIGHTÉEN (18) MONTHS AND OPEN TO THE PHASE 2 TRAFFIC PATTERN. (SÉE INTERMEDIATE CÓNTRACT TIME AND LIQUIDATED DAMAGES)

STEP 1:

AWAY FROM TRAFFIC AND USING LANE CLOSURES, CONSTRUCT THE FOLLOWING:

- LT SIDE OF NC 42 FROM PROJECT BEGIN (-L- STA. 16+00 +/-) TO -L- STA. 35+50 +/-, INCLUDING 54" TRÈNCHLESS PIPE INSTALLATION AT -L- STA. 27+50 +/- AND -DRW1-. (WEDGE EXISTING AS NEEDED FROM -L- STA. 16+00 +/- TO STA. 22+49 +/- TO MAINTAIN TRAVEL LANES)
- OMIT C&G FROM -L- STA. 31+70 +/- TO STA. 35+50 +/- AND CONSTRUCT 4' OF TEMPORARY PAVEMENT.
- TEMPORARY ALIGNMENT -LDET- WITH TEMPORARY GUARDRAIL ON LT SIDE (WEDGE EXISTING AS NEEDED FROM -L- STA. 35+50 +/- TO STA. 43+15 +/- TO MAINTAIN TRAVEL LANES)
- TEMPORARY ALIGNMENT -Y4DET- ALONG -Y4- (FOX RIDGE ROAD), WEDGING EXISTING AS NEEDED TO MAINTAIN TRAVEL LANES
- TEMPORARY ALIGNMENT -Y5DET- ALONG -Y5- (WOODBERRY DRIVE), WEDGING EXISTING AS NEEDED TO MAINTAIN TRAVEL LANES
- LT SIDE OF NC 42 FROM -L- STA. 138+50 +/- TO STA. 153+22 +/- AND NECESSARY WEDGING
- BOTH SIDES OF NC 42 FROM -L- STA. 186+00 +/- TO STA. 199+00 +/-INCLUDING -DRW8- AND -DRW9- AND WEDGING AS NEEDED
- -Y11C- (PORTOFINO DRIVE) - -Y12- (MOTORCYCLE ROAD) INCLUDING -DRW23-
- LT SIDÈ OF NC 42 FROM -L- STA. 216+50 +/- TO STA. 222+39 +/-

# **PHASING**

AWAY FROM TRAFFIC AND USING LANE CLOSURES, BEGIN CONSTRUCTION OF THE FOLLOWING:

- RT SIDE OF NC 42 FROM PROJECT BEGIN (-L- STA. 12+77 +/-) TO -L- STA. 21+96 +/- (WEDGE EXISTING, AS NEEDED, FROM -L- STA. 12+77 +/-TO STA. 22+49 +/-)
- RT SIDE OF NC 42 FROM -L- STA. 40+00 +/- TO STA. 49+75 +/-- RT SIDE OF NC 42 FROM -L- STA. 52+20 +/- TO STA. 81+00 +/-, INCLUDING RIGHT SIDE OF BRIDGE OVER THE NEUSE RIVER, -DRW3-, AND TEMPÓRARY PAVEMENT AT GRASS ISLAND LOCATION AROUND -L- STA. 73+60 +/- AND WEDGING OVER EXISTING
- \* INSTALL TEMPORARY SHORING #1 & #2 PRIOR TO EXCAVATION FOR THE END BENT CAPS
- \* INSTALL TEMPORARY SHORING #3 & #4 WHEN CONSTRUCTING ROADWAY APPROACHES AT BRIDGE
- LT SIDE OF NC 42 FROM -L- STA. 67+42 +/- TO STA. 75+70 +/-- -Y6- (CASTLEBERRY ROAD), INCLUDING -DRW18- AND TEMPORARY PAVEMENT
- ALONG -Y6- AT -L-- WEST SIDE OF -Y8- (BENNETT PLACE)
- RT SIDE OF NC 42 FROM -L- STA. 163+30 +/- TO STA. 170+17 +/-, INCLUDING RT SIDE OF CULVERT AT STA. 167+00 +/-
- \* PLACE PCB ON TEMPORARY PAVEMENT FROM -L- STA. 162+49 +/- TO STA. 168+44 +/- PRIOR TO BEGINNING WORK IN THIS AREA
- \* OMIT MEDIAN C&G AND REPLACE WITH 4' OF TEMPORARY PAVEMENT IN ORDER TO PLACE PCB ON PAVEMENT IN PHASE 2 \* TEMPORARY SHORING #6 WILL BE INSTALLED ALONG LEFT SIDE OF
- PROPOSED CONSTRUCTION - BOTH SIDES OF NC 42 FROM -L- STA. 215+00 +/- RT AND -L- STA. 222+39 +/- LT TO PROJECT END (-L- STA. 257+50 +/-) INCLUDING -DRW13-AND - DRW14-
- \* TEMPORARY SIGNAL #04-0874T1 WILL BE REQUIRED AT -Y13- (BUFFALO RD) TO COMPLETE WIDENING
- -Y13- (BUFFALO ROAD) INCLUDING -DRW21- AND -DRW22-

AWAY FROM TRAFFIC AND USING LANE CLOSURES, CONSTRUCT TEMPORARY PAVEMENT ON THE LT SIDE OF NC 42 IN THE FOLLOWING LOCATIONS:

- -L- STA. 75+70 +/- TO -L- STA. 92+54 +/-
- -L- STA. 94+92 +/- TO -L- STA. 138+50 +/-, INCLUDING THE FOLLOWING:
- 66" TRENCHLESS PIPE INSTALLATION AT -L- STA. 107+00 +/-- 84" BORE & JACK STEEL PIPE INSTALLATION AT -L- STA. 114+15 +/-
- ALONG WITH TEMPORARY PIPE EXTENSION AND TEMPORARY SHORING #5
- 72" TRENCHLESS PIPE INSTALLATION AT -L- STA. 136+00 +/-\* TEMPORARY SIGNAL #04-1412T1 WILL BE REQUIRED AT THE -Y9- (NEUSE
- RIVER PARKWAY) INTERSECTION - -L- STA. 154+55 +/- TO STA. 162+30 +/- INCLUDING 54" TRENCHLESS PIPE INSTALLATION AT -L- STA. 155+50 +/- AND OTHER PROPOSED DRAINAGE **FEATURES**
- -L- STA. 172+20 +/- TO STA. 186+00 +/-
- -L- STA. 199+00 +/- TO STA. 216+50 +/-

THE WORK REQUIRED IN PHASE 1, STEPS 1A, 1B AND 1C MAY BE CONDUCTED IN ANY ORDER AND MAY ALSO BE CONDUCTED CONCURRENTLY. THE WORK ALSO MAY BE CONDUCTED ALONG WITH OTHER WORK IN PHASE 1, STEP 1.

COMPLETE THE WORK REQUIRED IN PHASE 1, STEP 1A IN TWENTY-ONE (21) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LÍQUIDATED DAMAGES)

STEP 1A:

COMPLETE THE FOLLOWING: (SEE SHEET TMP-24)

- 1. USING RSD 1101.3, SHEET 2 OF 9, CLOSE -Y9- (NEUSE RIVER PARKWAY) AND PLACE TRAFFIC IN THE OFF-SITE DETOUR.
- 2. AWAY FROM TRAFFIC, CONSTRUCT -Y9- (NEUSE RIVER PARKWAY) AND -L-FROM STA. 92+54 +/- TO STA. 94+92 +/-
- 3. PLACE TEMPORARY MARKING AND MARKERS AND REOPEN TO TRAFFIC \* TEMPORARY SIGNAL #04-1412T1 WILL REMAIN IN PLACE

COMPLETE THE WORK REQUIRED IN PHASE 1, STEP 1B IN SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

COMPLETE THE FOLLOWING: (SEE SHEET TMP-25)

- 1. USING RSD 1101.03, SHEETS 1 & 2 OF 9, CLOSE -Y12A- (FLOWERS PARKWAY) AND PLACE TRAFFIC IN THE OFF-SITE DETOUR.
- 2.AWAY FROM TRAFFIC, CONSTRUCT -Y12A- (FLOWERS PARKWAY)
- 3. PLACE TEMPORARY MARKING AND MARKERS AND REOPEN TO TRAFFIC

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-3

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COMPLETE THE WORK REQUIRED IN PHASE 1, STEP 1C IN SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

#### STEP 1C:

COMPLETE THE FOLLOWING: (SEE SHEET TMP-26)

- 1.USING RSD 1101.3, SHEETS 1 & 2 OF 9, CLOSE -Y12B- (PINEVILLE BLVD) AND PLACE TRAFFIC IN THE OFF-SITE DETOUR 2. CONSTRUCT -Y12B- (PINEVILLE BLVD)
- 3. PLACE TEMPORARY MARKING AND MARKERS AND REOPEN TO TRAFFIC

USING LANE CLOSURES, PLACE TEMPORARY MARKING AND SIMULTANEOUSLY COMPLETE THE FOLLOWING:

- SHIFT TRAFFIC TO TEMPORARY PATTERN ON LT SIDE OF NC 42 FROM PROJECT BEGIN TO -L- STA. 35+50 +/- AND -LDET- TO EXISTING THAT WAS CONSTRUCTED IN STEP 1
- SHIFT -Y4- TRAFFIC TO THE -Y4DET- TEMPORARY ALIGNMENT ALONG -Y4- (FOX RIDGE ROAD) THAT WAS CONSTRUCTED IN STEP 1

ONCE TRAFFIC IS SHIFTED, BEGIN CONSTRUCTION OF THE FOLLOWING USING LANE CLOSURES:

- RT SIDE OF NC 42 FROM -L- STA. 21+96 +/- TO STA. 37+00 +/-
- -Y4- (FOX RIDGE ROAD), INCLUDING -DRW16-
- RT SIDE OF NC 42 FROM -L- STA. 38+74 +/- TO STA. 40+00 +/-
- TEMPORARY PAVEMENT IN MEDIAN FROM -L- STA. 32+70 +/- TO STA. 35+50 +/-

USING LANE CLOSURES, PLACE TEMPORARY MARKING AND SHIFT TRAFFIC TO THE TEMPORARY PATTERN FROM -L- STA. 74+05 +/- TO -L- STA. 163+74 +/-, ON TEMPORARY AND PROPOSED PAVEMENT CONSTRUCTED IN STEP 1.

- \* TEMPORARY SIGNAL #04-1412T2 WILL BE REQUIRED AT -Y9- (NEUSE
- RIVER PARKWAY) WHEN SHIFTING TO THE TEMPORARY PATTERN \* PLACE PCB ALONG LEFT SIDE OF -L- FROM STA. 113+40 +/- TO STA. 117+00 +/- PRIOR TO SHIFTING TRAFFIC

ONCE TRAFFIC IS SHIFTED, BEGIN CONSTRUCTION OF RT SIDE OF NC 42 FROM -L- STA. 81+48 +/- TO -L- STA. 163+30 +/-, INCLUDING THE FOLLOWING:

- -DRW4-, -DRW6-, -DRW7-, AND -DR1- (ALECIA COURT)

TIE TO EXISTING NC 42

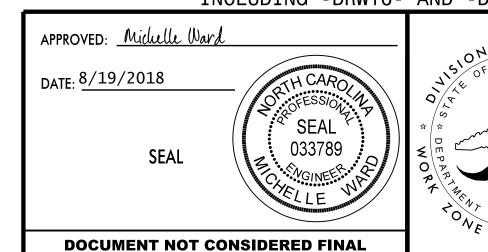
- EAST SÍDE OF -Ý8- (BENNETT PLACE), INCLUDING PORTION OF MEDIAN ISLAND
- -Y10- (QUEEN ANN DRIVE), INCLUDING MEDIAN ISLAND
- OMIT MÈDIAN C&G FROM -Ĺ- STA. 96+50 +/- TO STA. 114+65 +/- AND REPLACE WITH TEMPORARY PAVEMENT IN ORDER TO PLACE PCB ON PAVEMENT IN PHASE 2
- REMAINDER OF 84" STEEL PIPE INSTALLATION AT -L- STA. 114+15 +/-- -Y11- (NEUSE COLONY DRIVE), INCLUDING MEDIAN ISLAND AND TEMPORARY

USING LANE CLOSURES. PLACE TEMPORARY MARKING AND SIMULTANEOUSLY COMPLETE THE FOLLOWING:

- SHIFT TRAFFIC TO THE TEMPORARY PATTERN FROM -L- STA. 170+45 +/- TO -L- STA. 219+60 +/- ON TEMPORARY AND PROPOSED PAVEMENT CONSTRUCTED IN STEP 1
- OPEN -Y11C- (PORTOFINO DRIVE) AND -Y12- (MOTORCYCLE ROAD) TO TRAFFIC - CLOSE -Y11A- (TUSCAN RIDGE RÓAD) AND DIRÈCT TRAFFIC THROÚGH VERONA DR
- TO NC 42 AS SHOWN ON SHEET TMP-37 \* IN ORDER TO MINIMIZE THE DURATION THAT -Y11A- TRAFFIC WILL BE DETOURED THROUGH VERONA DRIVE, -Y11A- SHALL NOT BE CLOSED IMMEDIATELY UPON SHIFTING TRAFFIC TO THE PHASE 1, STEP 2 PATTERN, UNLESS READY TO PROCEED WITH WORK IN THIS AREA.
- PERMANENTLY CLOSE EXISTING -Y12- (MOTORCYCLE ROAD), CONSTRUCT TURNAROUND AND INSTALL "END OF ROAD" OBJECT MARKEŔŚ"
- \* WILL REQUIRE TEMPORARY SIGNAL #04-1423T1 AT THE -Y11C-/-Y12-(PORTOFINO DRIVE/MOTORCYCLE ROAD) INTERSECTION

ONCE TRAFFIC IS SHIFTED, BEGIN CONSTRUCTION OF THE FOLLOWING AWAY FROM TRAFFIC AND USING LANE CLOSURES:

- RT SIDE OF NC 42 FROM -L- STA. 167+75 +/- TO -L- STA. 178+00 +/-, INCLUDING TEMPORARY PAVEMENT FROM -L- STA. 167+75 +/- TO 171+16 +/-
- -Y11A- (TUSCAN RIDGE DRIVE), INCLUDING PORTION OF MEDIAN ISLAND AND TEMPORARY PAVEMENT
- -LDET2-
- RT SIDE OF NC 42 FROM -L- STA. 199+00 +/- TO -L- STA. 214+60 +/-, INCLUDING -DRW10- AND -DRW12-



**UNLESS ALL SIGNATURES COMPLETED** 

PHASING

PHASE 1 (CONT.)

THE WORK REQUIRED IN PHASE 1, STEPS 2A AND 2B MAY BE CONDUCTED ALONG WITH OTHER WORK IN PHASE 1, STEP 2, HOWEVER, STEP 2A MUST BE COMPLETED PRIOR TO STEP 2B.

USING LANE CLOSURES, COMPLETE THE FOLLOWING (SEE SHEET TMP-42):

- 1. SHIFT -Y5- (WOODBERRY DRIVE) TRAFFIC TO THE -Y5DET- TEMPORARY ALIGNMENT
- ALONG -Y5- THAT WAS CONSTRUCTED IN PHASE 1, STEP 1 2.CONSTRUCT -Y5- (WOODBERRY DRIVE) AND RT SIDE OF NC 42 FROM -L-STA. 50+88 +/- TO STA. 52+20 +/-, INCLUDING TEMPORARY TIE FROM -Y5-TO EXISTING NC 42
- 3. PLACE TEMPORARY MARKING AND MARKERS AND OPEN -Y5- (WOODBERRY DRIVE) TO TRAFFIC THEN CONSTRUCT - DRW17- & REMOVE - Y5DET-

#### STEP 2B:

USING LANE CLOSURES, COMPLETE THE FOLLOWING (SEE SHEETS TMP-43 & TMP-44):

- RT SIDE OF -L- FROM STA. 38+74 +/- TO STA. 50+88 +/-
- -Y4- (FOX RIDGE ROAD), INCLUDING -DRW16-

THEN OPEN -Y4- (FOX RIDGE ROAD) ACCESS TO NC 42 VIA -Y5- (WOODBERRY DRIVE) AS SHOWN. ONCE -Y4- (FOX RIDGE ROAD) IS OPEN, CONSTRUCT RT SIDE OF NC 42 FROM -L- STA. 37+00 +/- TO -L- STA. 38+74 +/- AND -DRW15- AND REMOVE -Y4DET- ALONG -Y4- (FOX RIDGE ROAD).

USING LANE CLOSURES, COMPLETE THE FOLLOWING:

- RT SIDE OF NC 42, NOT COMPLETED EARLIER, FROM PROJECT BEGIN TO -Y12A- (FLOWERS PARKWAY), INCLUDING -DRW3-, RIGHT SIDE OF BRIDGE OVER THÈ NEUSE RIVER, -DRW4-, -DRW6-, -DRW7-, -DR1- (ALECIA COURT), -DRW8-, -DRW9-, -DRW10-, -DRW12- AND RIGHT SIDE OF CULVERT AT
- -L- STA. 167+00 +/-- -Y6- (CASTLEBERRY ROAD)
- -Y8- (BENNETT PLACE)
- -Y10- (QUEEN ANN DRIVE)
- -Y11- (NEUSE COLONY DRÍVE)
- -Y11A- (TUSCAN RIDGE DRIVÉ)

USING LANE CLOSURES, PLACE TEMPORARY MARKING AND SHIFT TRAFFIC TO THE PHASE 2 TRAFFIC PATTERN. (SEE SHEETS TMP-45 THRU TMP-61)

\* TEMPORARY AND/OR FINAL SIGNALS WILL BE REQUIRED AT THE FOLLOWING INTERSECTIONS WITH NC 42:

GLEN LAUREL RETAIL (#04-1433) -Y6- (CASTLEBERRY ROAD) (#04-1241T1)

-Y9- (NEUSE RIVER PARKWAY) (#04-1412T3) -Y11C-/-Y12- (PORTOFINO DRIVE/MOTORCYCLE ROAD) (#04-1423T1) REMAINS

\* PCB WILL BE REQUIRED AT THE FOLLOWING LOCATIONS PRIOR TO SHIFTING TO THE PHASE 2 TRAFFIC PATTERN:

-L- STA. 61+50 +/- TO STA. 67+50 +/- (SEE SHEET TMP-49)

-L- STA. 96+00 +/- TO STA. 110+74 +/- (SEE SHEETS TMP-51 AND TMP-52) -L- STA. 163+30 +/- TO STA. 176+00 +/- (SEE SHEETS TMP-56 AND TMP-57)

ONCE TRAFFIC IS PLACED IN THE PHASE 2 TRAFFIC PATTERN ON -LDET2- FROM STA. 171+20 +/- TO STA. 181+91 +/-, PROCEED WITH THE WORK REQUIRED DURING THE INTERMEDIATE CONTRACT TIME IN PHASE 2, STEP 1B.

#### PHASE 2 (SEE SHEETS TMP-45 THRU TMP-62C)

AWAY FROM TRAFFIC AND USING LANE CLOSURES, CONSTRUCT LT SIDE OF NC 42 IN THE FOLLOWING LOCATIONS:

- -L- STA. 35+50 +/- TO -L- STA. 68+00 +/-, INCLUDING -DRW2- AND LEFT SIDE OF BRIDGE OVER THE NEUSE RIVER (INCLUDING CLOSURE POUR)
- -L- STA. 75+70 +/- TO -L- STA. 92+54 +/-- -L- STA. 94+92 +/- TO -L- STA. 138+50 +/-, INCLUDING JUNCTION BOX AND
- PIPE AT -L- STA. 114+15 +/-- -L- STA. 153+22 +/- TO -L- STA. 171+16 +/-, INCLUDING LEFT SIDE OF
- CULVERT AT -L- STA. 167+00 +/-
- -L- STA. 199+00 +/- TO -L- STA. 216+50 +/-, INCLUDING -DRW11-

AWAY FROM TRAFFIC AND USING LANE CLOSURES, CLOSE AND CONSTRUCT -Y10A-. TRAFFIC WILL UTILIZE ALTERNATE ENTRANCES OFF OF -Y9- (NEUSE RIVER PARKWAY).

USING LANE CLOSURES, CONSTRUCT -Y10B- (TRILLIUM WAY) AND -Y10C- (BROOKHAVEN DRIVE) UNDER TRAFFIĆ, INCLUDING -DRW19- AND -DRW20-1 USE INCIDENTAL STONE AS NEEDED TO MAINTAIN TRAFFIC.

AWAY FROM TRAFFIC AND USING LANE CLOSURES, COMPLETE CONSTRUCTION OF THE FOLLOWING:

- RT SIDE OF NC 42 FROM -Y12A- (FLOWERS PARKWAY) TO PROJECT END (-L- STA. 257+50 +/-), INCLUDING -DRW13- AND -DRW14-
- LT SIDE OF NC 42 FROM -L- STA. 222+39 +/- TO PROJECT END
- (-L- STA. 257+50 +/-)
- -Y13- (BUFFALO ROAD) INCLUDING -DRW21- AND -DRW22-

THE WORK REQUIRED IN PHASE 2, STEP 1A AND 1B SHALL BE CONDUCTED ALONG WITH OTHER WORK IN PHASE 2, STEP 1.

COMPLETE THE WORK REQUIRED IN PHASE 2, STEP 1A IN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

#### COMPLETE THE FOLLOWING:

- 1. USING RSD 1101.03, SHEET 2 OF 9, CLOSE -Y7- (EAST SCHOOL ROAD) AND PLACE TRAFFIC IN THE OFF-SITE DETOUR
- 2.AWAY FROM TRAFFIC, CONSTRUCT -Y7- (EAST SCHOOL ROAD) 3. PLACE TEMPORARY MARKING AND MARKERS AND REOPEN TO CURRENT TEMPORARY TRAFFIC PATTERN

THE WORK REQUIRED IN PHASE 2, STEP 1B SHALL BE CONDUCTED IMMEDIATELY UPON SHIFTING TO THE PHASE 2 TRAFFIC PATTERN IN ORDER TO MINIMIZE THE DURATION THAT TRAFFIC WILL BE ON THE -LDET2- TEMPORARY ALIGNMENT.

COMPLETE THE WORK REQUIRED IN PHASE 2, STEP 1B IN SIXTY (60) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

#### STEP 1B:

COMPLETE THE FOLLOWING:

- 1.CLOSE -Y11B- (VERONA DRIVE) AND DIRECT TRAFFIC TO TUSCAN RIDGE ROAD AS SHOWN ON SHEETS TMP-57 AND TMP-58
- 2.AWAY FROM TRAFFIC AND USING LANE CLOSURES, CONSTRUCT RIGHT SIDE OF
- -L- FROM STA. 178+00 +/- TO 186+00 +/- AND -Y11B- (VERONA DRIVE). 3. PLACE TEMPORAY MARKINGS AND MARKERS AND OPEN -Y11B- (VERONA DRIVE) TO THE PHASE 2, STEP 2 TRAFFIC PATTERN. (SEE SHEETS TMP-62A, TMP-62B AND TMP-62C)
  - \* TEMPORARY SIGNAL WILL BE REQUIRED AT THE -Y11C-/-Y12- (PORTOFINO DR/ MOTORCYCLE ROAD) INTERSECTION (#04-1423T2)

AWAY FROM TRAFFIC AND USING LANE CLOSURES, CONSTRUCT LEFT SIDE OF -L- FROM STA. 171+16 +/- TO 186+00 +/- (SEE SHEETS TMP-62A AND TMP-62B)

# STEP 3:

USING LANE CLOSURES, PLACE TEMPORARY MARKINGS AND SHIFT TRAFFIC TO THE PHASE 3 TRAFFIC PATTERN.

- \* TEMPORARY SIGNALS WILL BE REQUIRED AT THE FOLLOWING INTERSECTIONS WITH NC 42:
- -Y6- (CASTLEBERRY ROAD) (#04-1241T2)
- -Y9- (NEUSE RIVER PARKWAY) (#04-1412T4)
- -Y11C-/-Y12- (PORTOFINO DRIVE/MOTORCYCLE ROAD) (#04-1423T3)
- -Y13- (BUFFALO ROAD) (#04-0874T2)

PROJ. REFERENCE NO.	SHEET NO.
R-3825B	TMP-3A

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## PHASE 3 (SEE SHEETS TMP-63 THRU TMP-82)

AWAY FROM TRAFFIC AND USING LANE CLOSURES AS NEEDED, CONSTRUCT MEDIAN GRASS AND MONOLITHIC ISLANDS THROUGHOUT THE PROJECT, INCLÚDING ANY C&G OMITTED

- \* ALL ISLAND CONSTRUCTION MAY OCCUR SIMULTANEOUSLY, EXCEPT AS NOTED FOR BULB-OUT AROUND -L- STA. 142+00 +/-. AT THIS LOCATION, ALTERNATE ISLAND CONSTRUCTION SO THAT U-TURN REMAINS OPEN AT ALL
- \* ALL TRAFFIC WILL U-TURN AT NEAREST INTERSECTION (OR BULB-OUT LOCATION AROUND -L- STA. 142+00 +/-) DURING CONSTRUCTION OF MEDIAN.

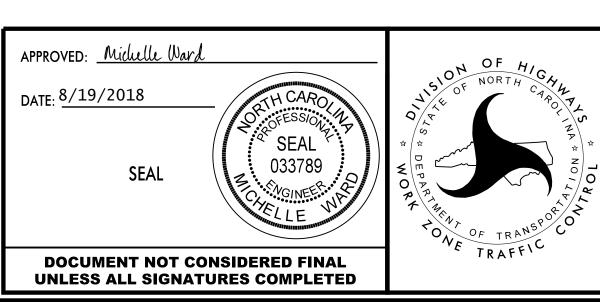
USING LANE CLOSURES, INSTALL AND COVER PROPOSED SIGNAL AT -Y12A-(FLOWERS PARKWAY).

USING LANE CLOSURES, PLACE THE FINAL LAYER OF SURFACE COURSE AND TEMPORARY MARKINGS IN THE FINAL PATTERN, THEN PLACE TRAFFIC IN THE FINAL PATTERN.

- \* FINAL SIGNALS WILL BE REQUIRED AT THE FOLLOWING INTERSECTIONS WITH NC 42:
- -Y6- (CASTLEBERRY ROAD) (#04-1241)
- -Y9- (NEUSE RIVER PARKWAY) (#04-1412) -Y11C-/-Y12- (PORTOFINO DRIVE/MOTORCYCLE ROAD) (#04-1423)
- -Y12A- (FLOWERS PARKWAY) (#04-1432)
- -Y13- (BUFFALO ROAD) (#04-0874)

USING LANE CLOSURES, PLACE THE FINAL MARKINGS AND MARKERS AND REOPEN TRAFFIC TO THE FINAL PATTERN.

REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.

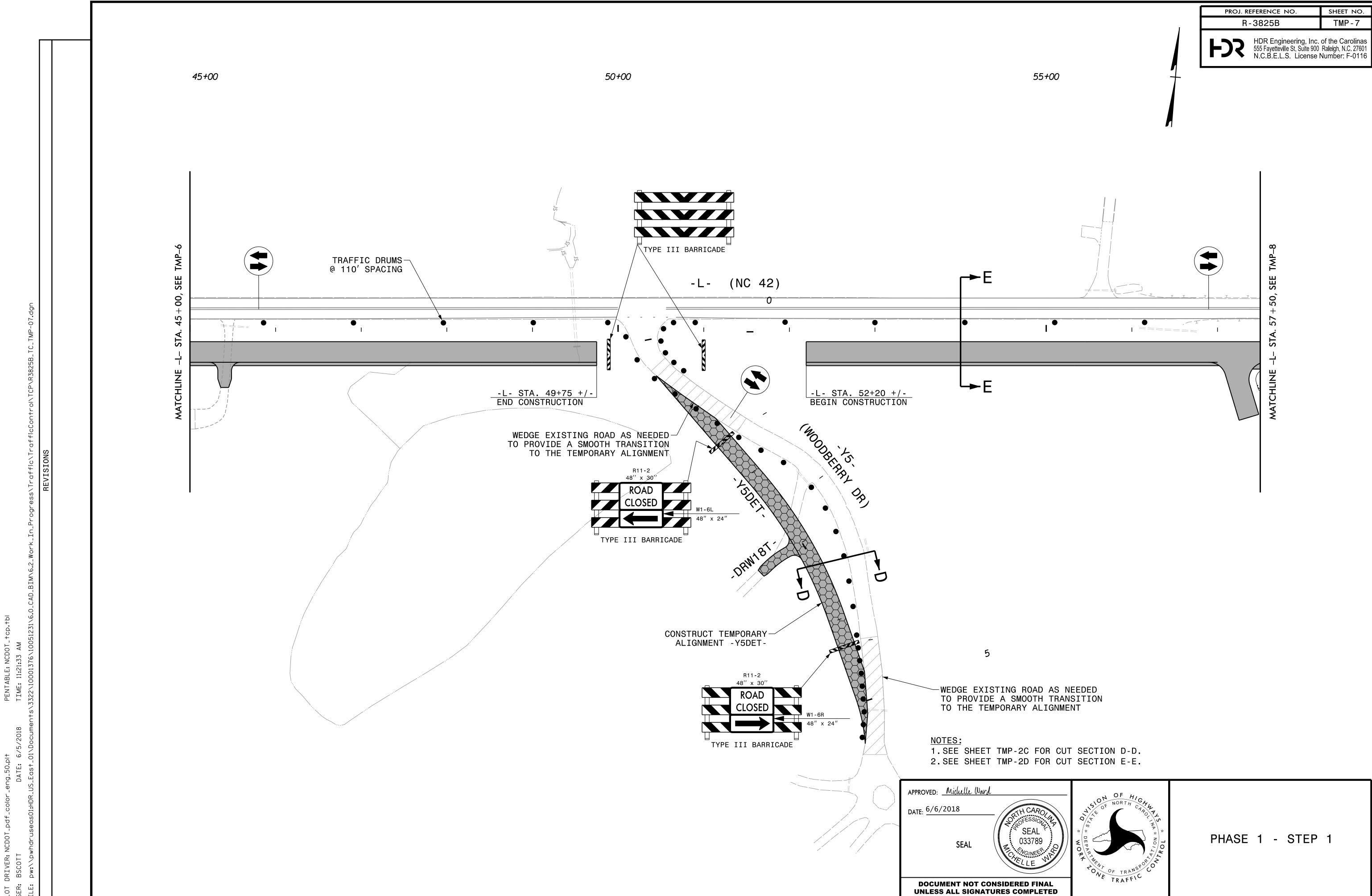


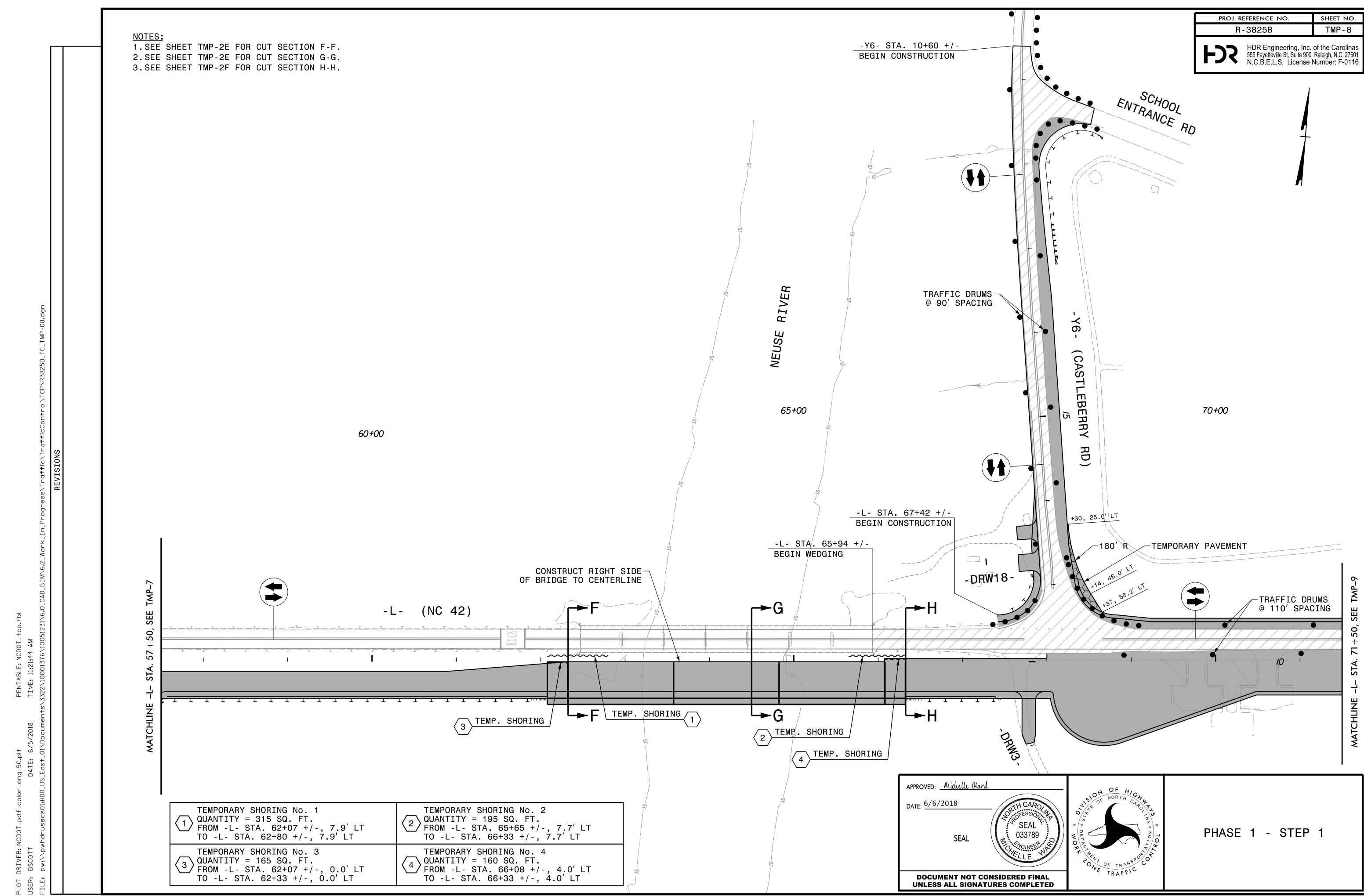
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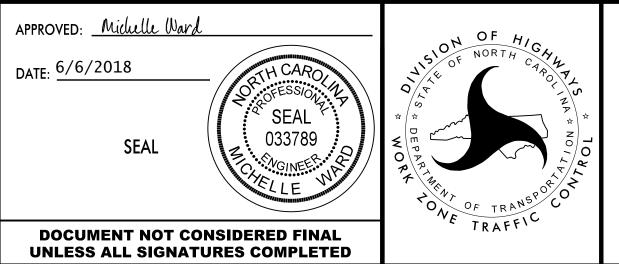
R-3825B TMP-5 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 20+00 *25+00 30+00* MAINTAIN DRIVEWAY ACCESS—DURING CONSTRUCTION USING INCIDENTAL STONE AS NECESSARY (OMIT MEDIAN C&G AS NEEDED -L- STA. 31+70 +/-END C&G CONSTRUCTION TO MAINTAIN DRIVEWAY ACCESS) BEGIN TEMPORARY PAVEMENT -L- STA. 19+87 +/-, 6.3' LT -L- STA. 30+85 +/-END 5000' R BEGIN 7000' R -L- STA. 25+85 +/-END LANE SHIFT END 7000' R TIE TO EXISTING MARKINGS TRAFFIC DRUMS-5000′ R ¬ @ 110' SPACING -L- (NC 42) *\_*7000′ R 48'' X 48'' 12' EX. 12' EX. **エーーローエーーーエー** OMIT MEDIAN C&G — AND PLACE 4' OF TEMPORARY PAVEMENT -MATC -INSTALL 54" TRENCHLESS PIPE & OTHER PROPOSED DRAINAGE FEATURES REQUIRED TO MAINTAIN WATER FLOW TRAFFIC DRUMS
@ 55' SPACING -L- STA. 27+00 +/--L- STA. 21+96 +/-BEGIN C&G CONSTRUCTION END CONSTRUCTION RT \_ -L- STA. 22+49 +/-END WEDGING NOTE: SEE SHEET TMP-2B FOR CUT SECTION A-A APPROVED: Midulle Ward DATE: 6/6/2018 PHASE 1 - STEP 1 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.

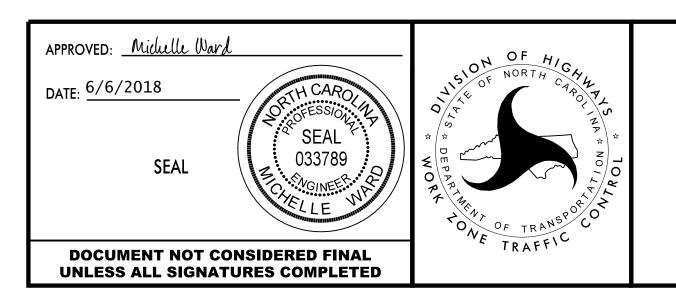
SHEET NO.







PHASE 1 - STEP 1



PHASE 1 - STEP 1

TEMPORARY SHORING No. 5
QUANTITY = 75 SQ. FT.
FROM -L- STA. 114+05 +/-, 39.0' LT
TO -L- STA. 114+30 +/-, 39.0' LT

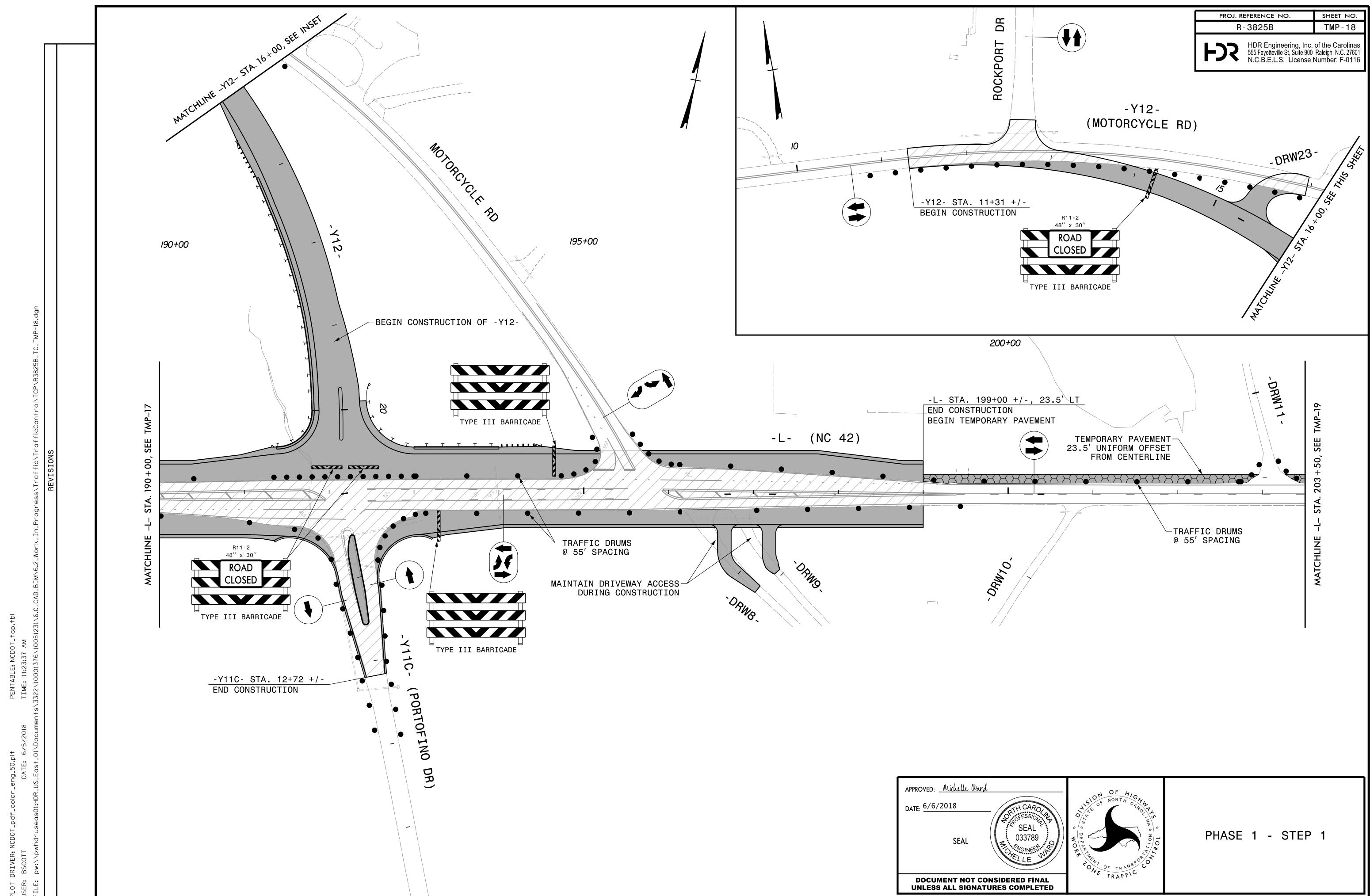
PHASE 1 - STEP 1

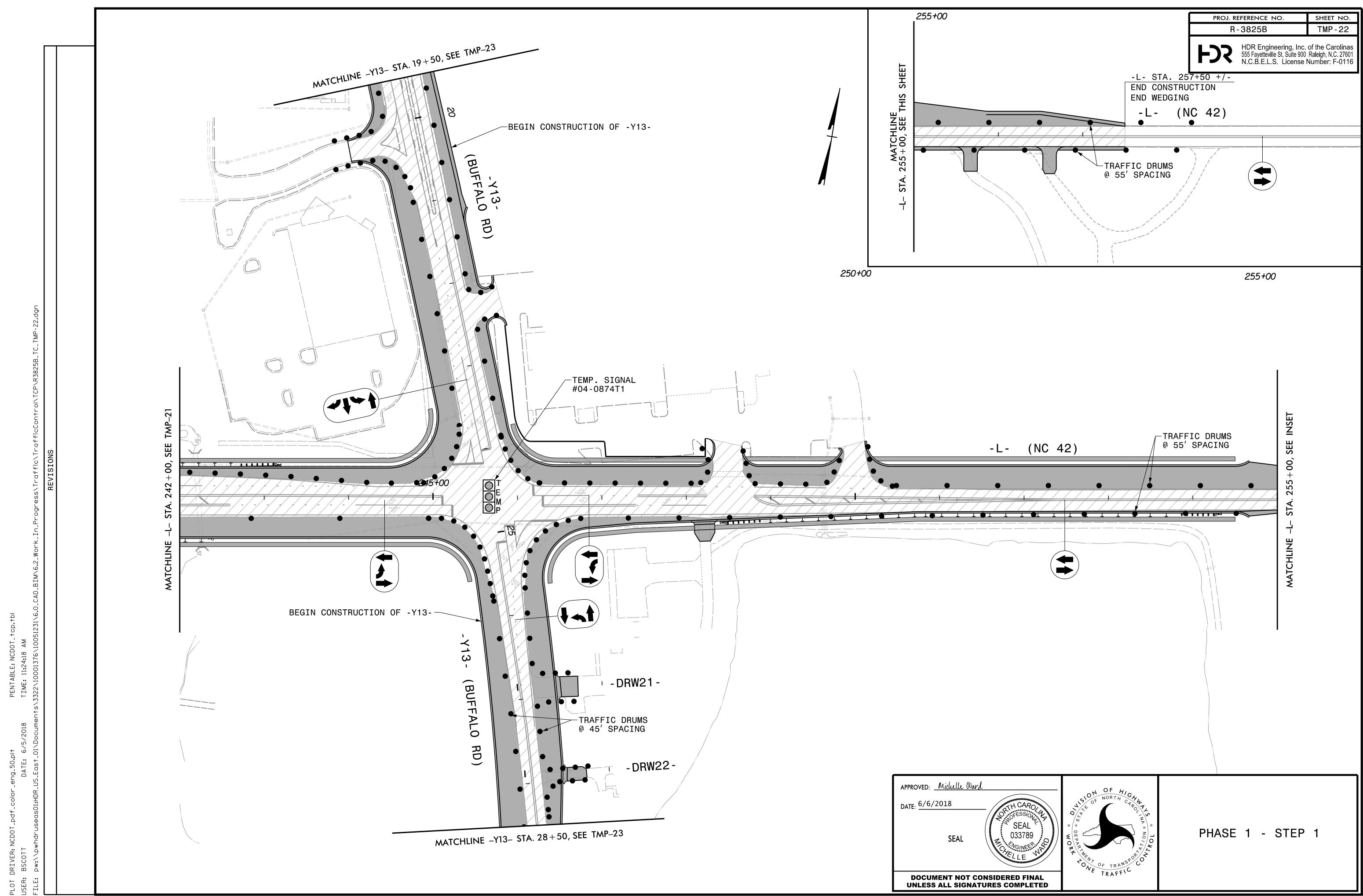
DATE: 6/6/2018

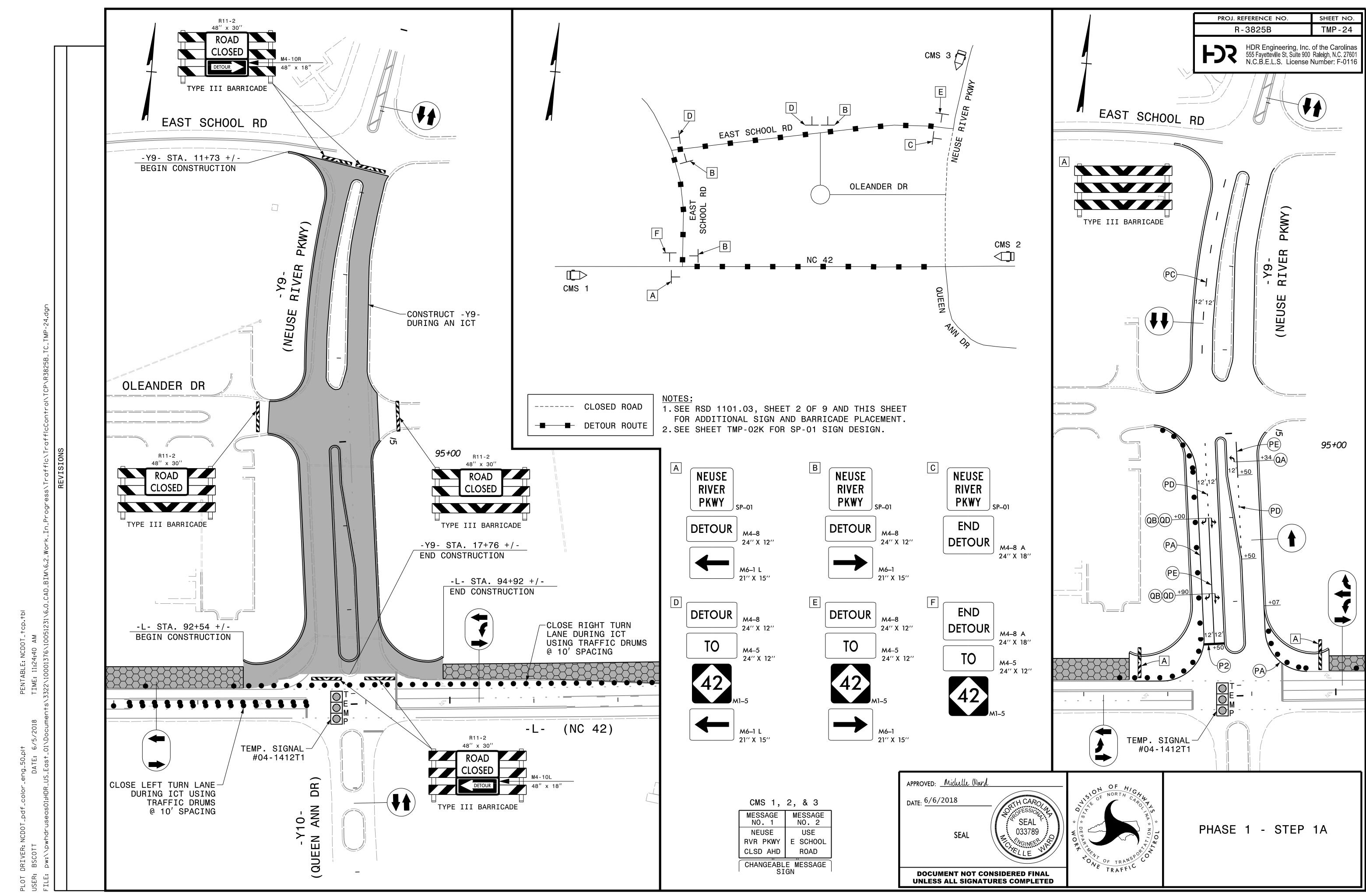
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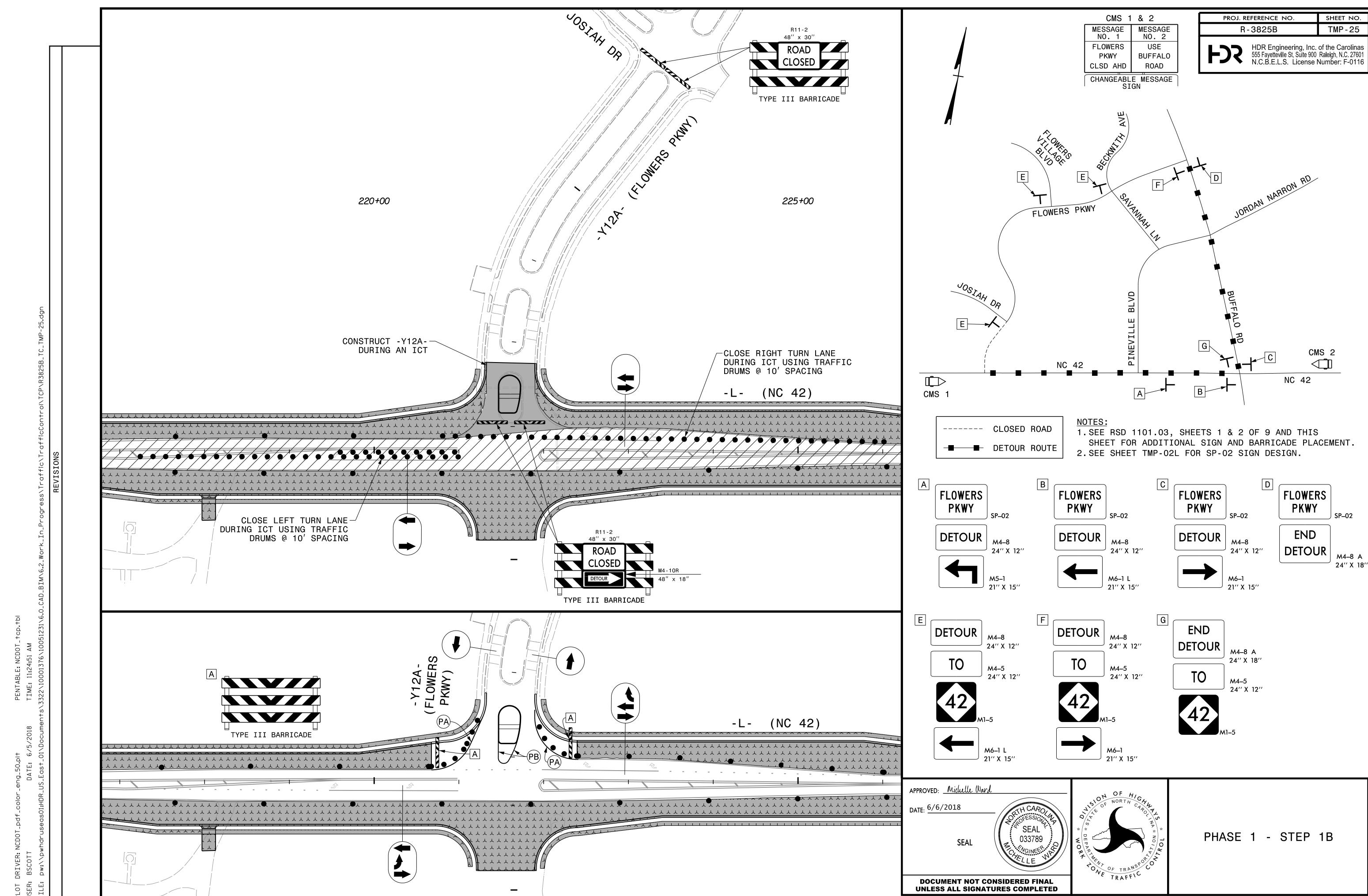
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

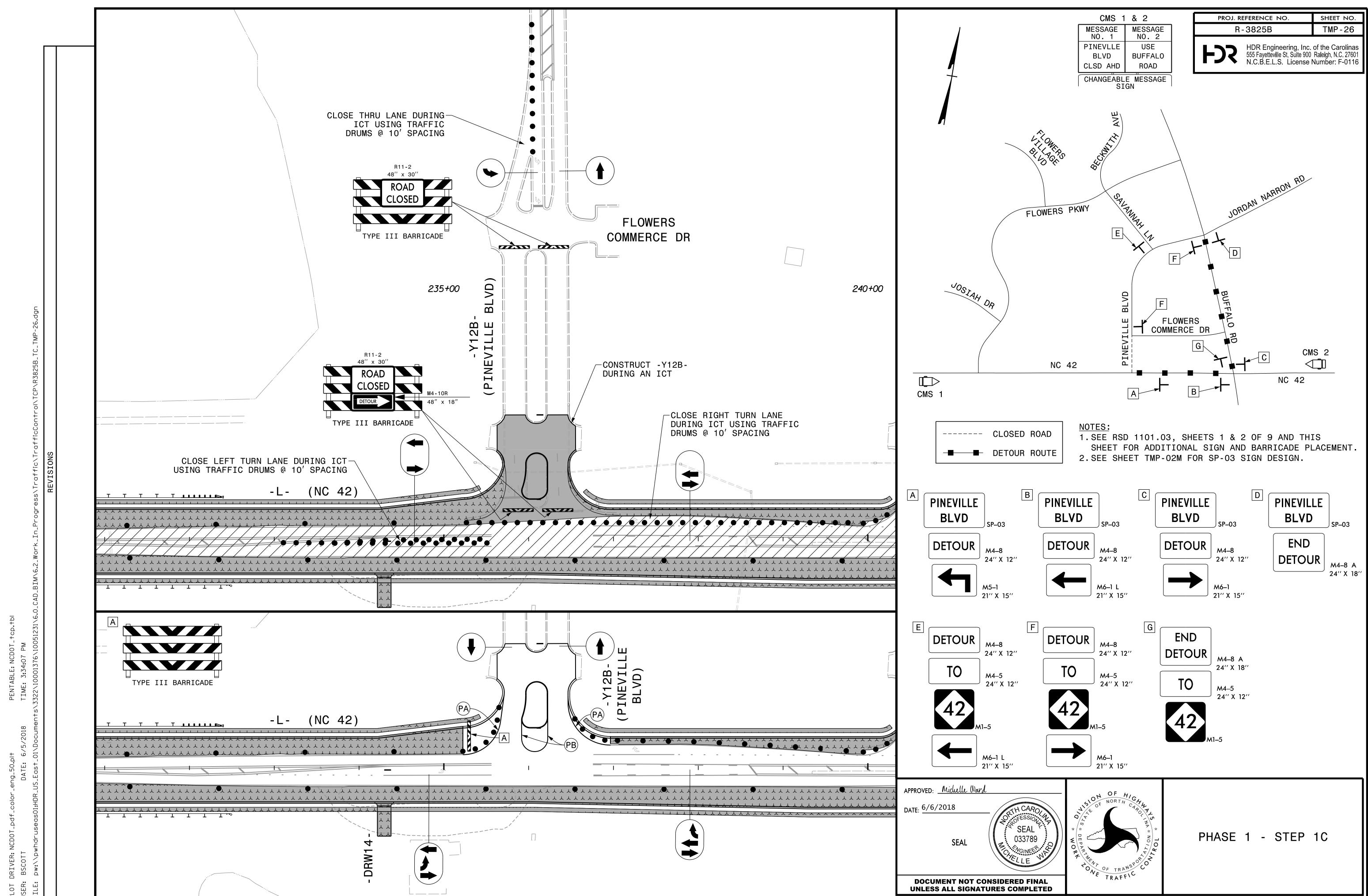
PHASE 1 - STEP 1







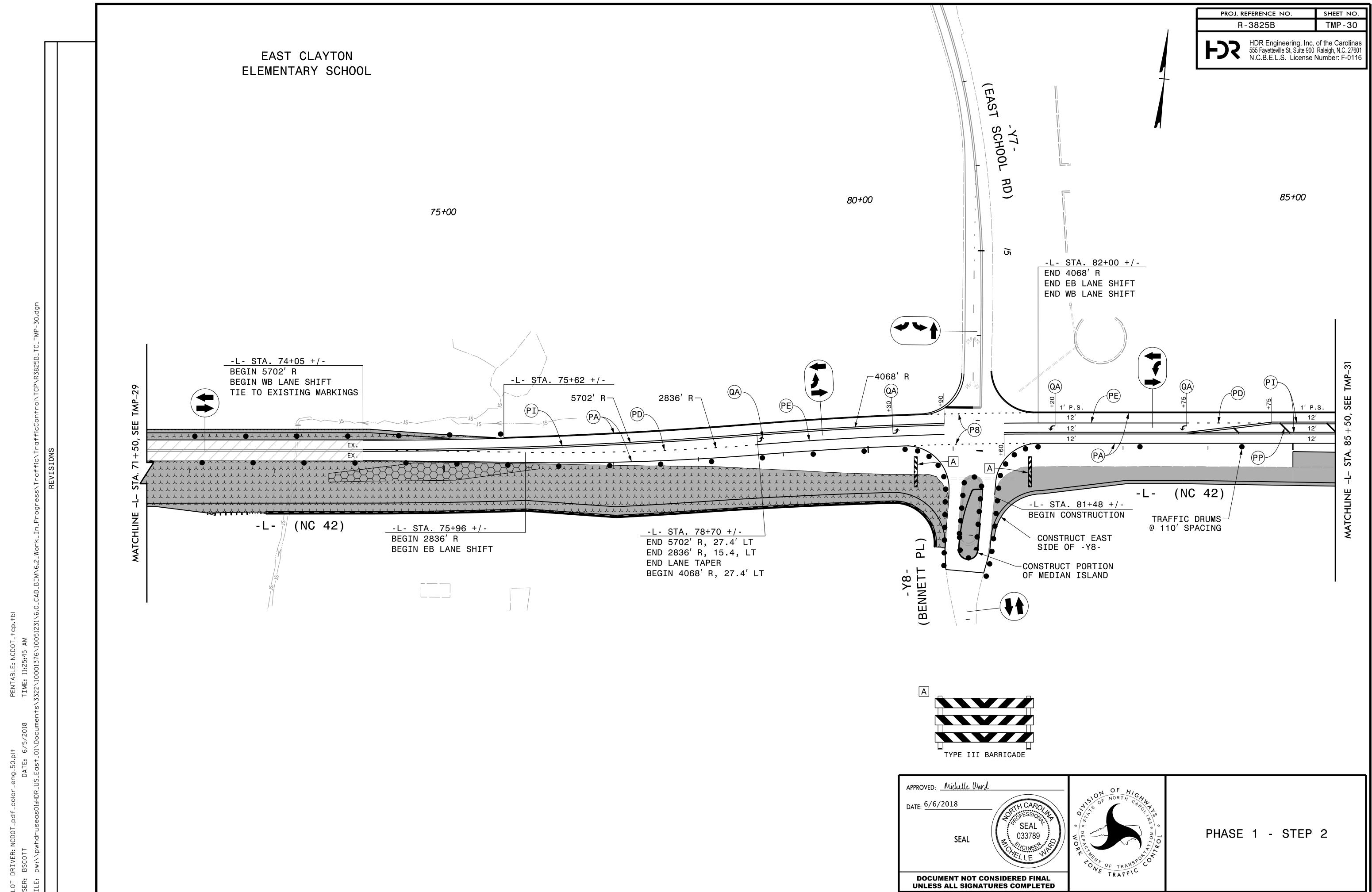




R-3825B TMP-28 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 *30+00* 20+00 *25+00* -L- STA. 19+98 +/-, 7.2' LT END 1050' R BEGIN 1062' R -L- STA. 21+83 +/-END 1062' R END LANE SHIFT TRAFFIC DRUMS
@ 110' SPACING -L- (NC 42) 12′ 12' / 12′ 12' 12′ \_1050′ R -L- STA. 21+96 +/-BEGIN CONSTRUCTION **48**′′ X 48′′ TYPE III BARRICADE 45 M.P.H. W13-1 24" X 24" -L- STA. 30+50 +/-NOTE: SEE SHEET TMP-2B FOR CUT SECTION A-A APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 1 - STEP 2 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.

SHEET NO.



DR

-Y10-(QUEEN ANN

TYPE III BARRICADE

pw://pwhdruseasoli.hDK\_US\_East\_0I/

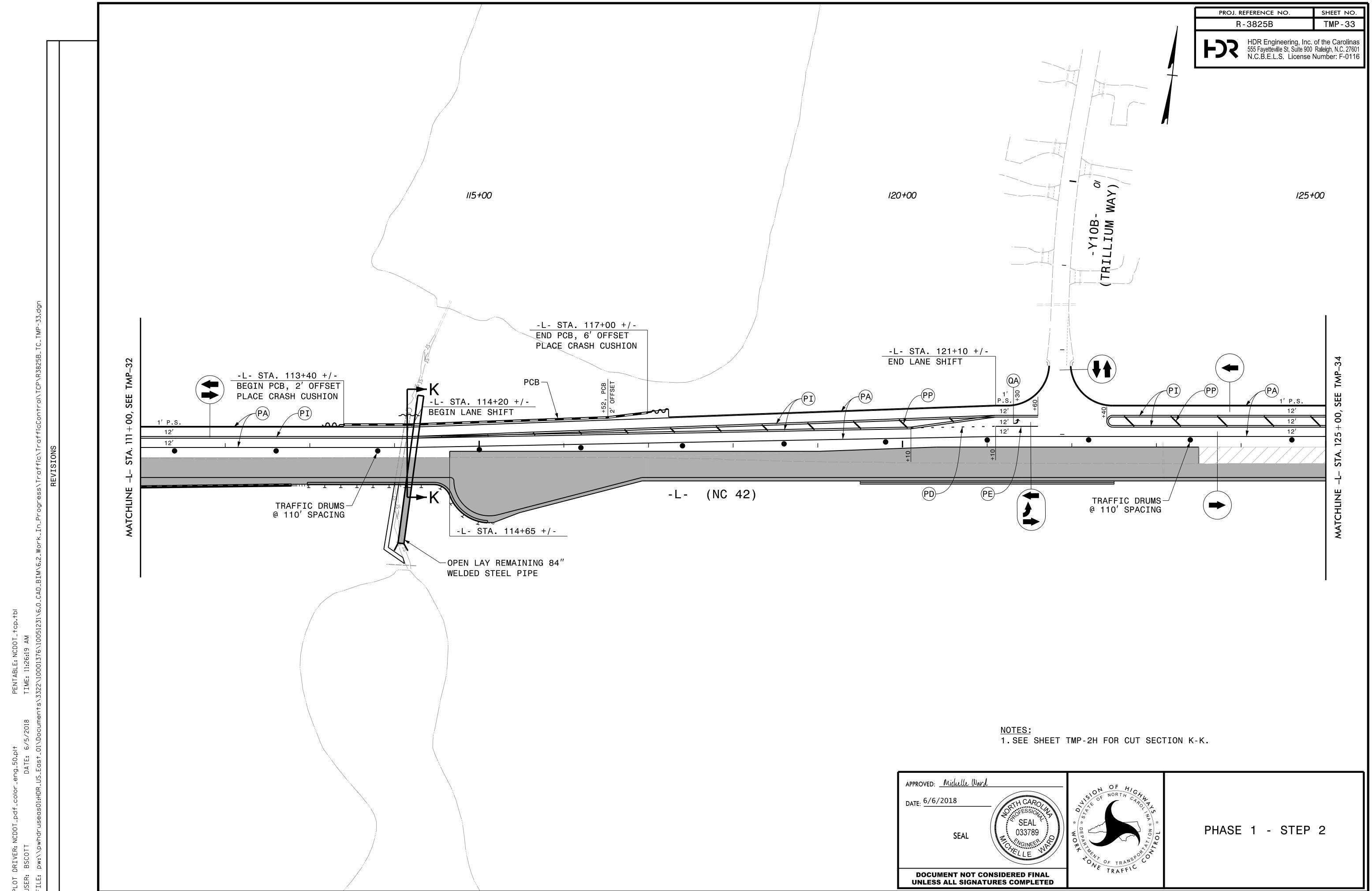
DATE: 6/6/2018

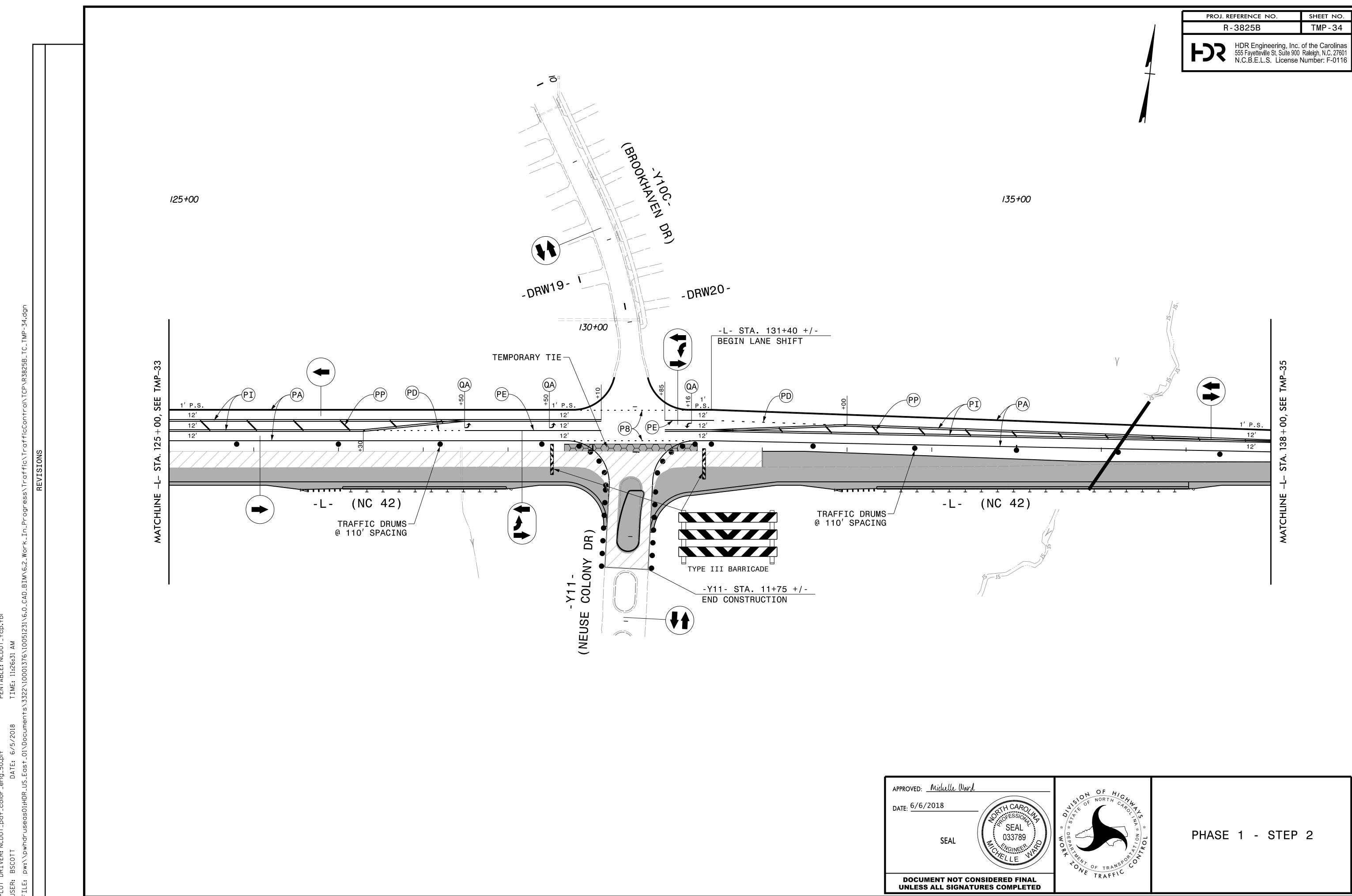
SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

OMIT MEDIAN C&G AND — REPLACE WITH 1' OF TEMPORARY PAVEMENT

PHASE 1 - STEP 2



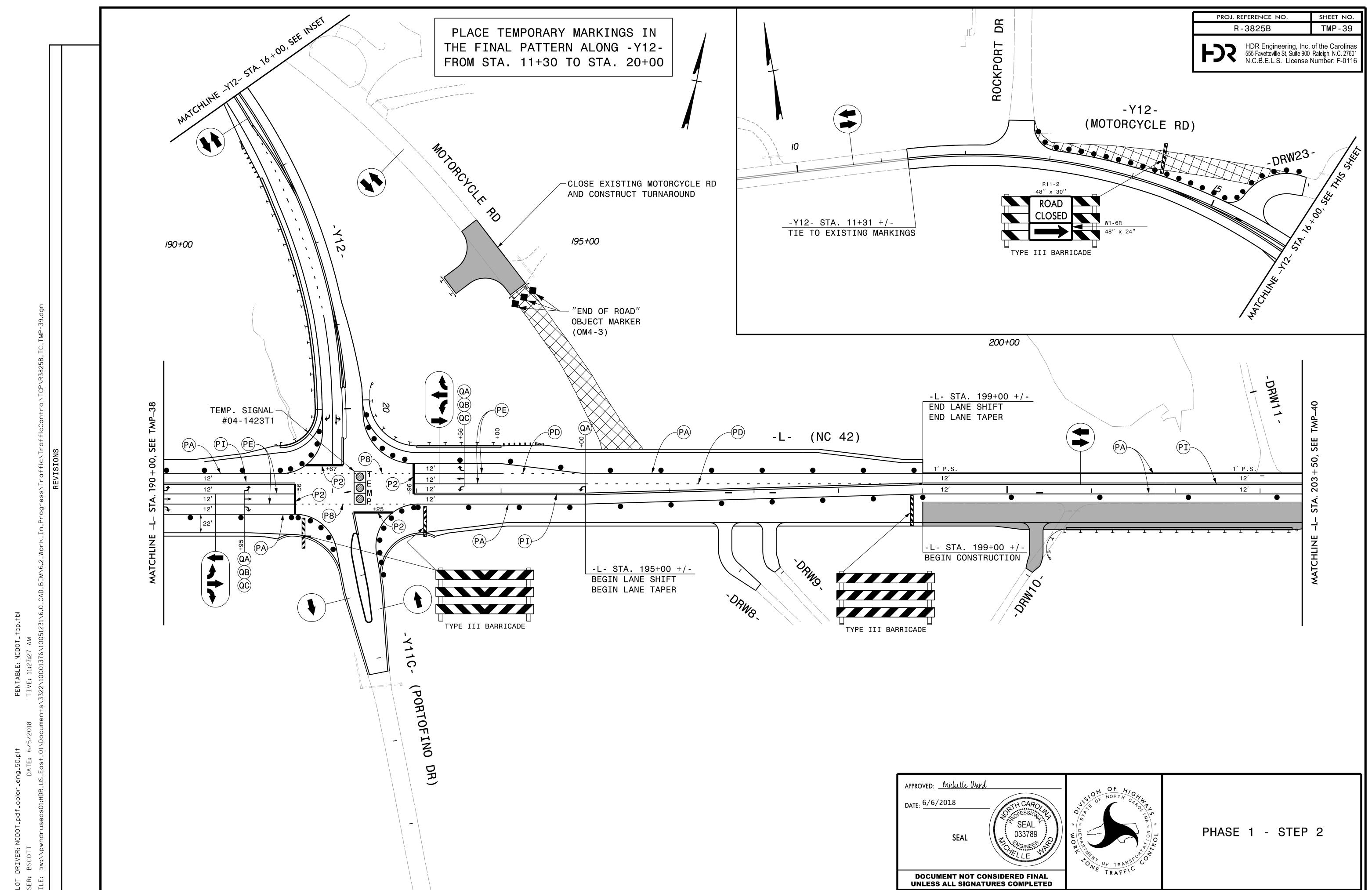


PHASE 1 - STEP 2

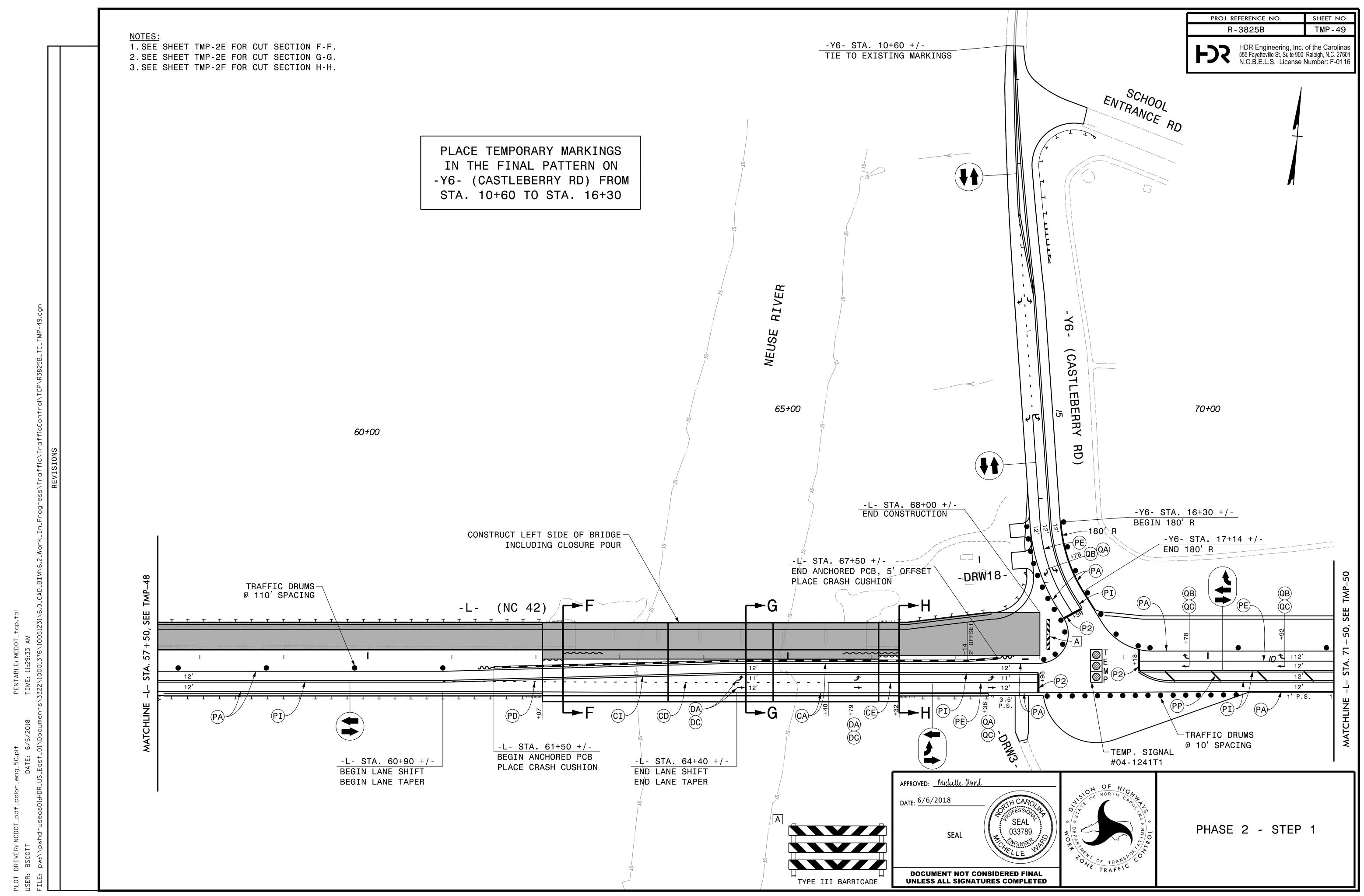
PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-36 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 *155+00* 160+00 -L- STA. 163+74 +/-TIE TO EXISTING MARKINGS -L- STA. 153+22 +/--L- STA. 162+30 +/-12′ 12′ -L- STA. 163+30 +/-END CONSTRUCTION TYPE III BARRICADE TRAFFIC DRUMS— @ 110' SPACING -DRW7 (ALECIA -APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 1 - STEP 2 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

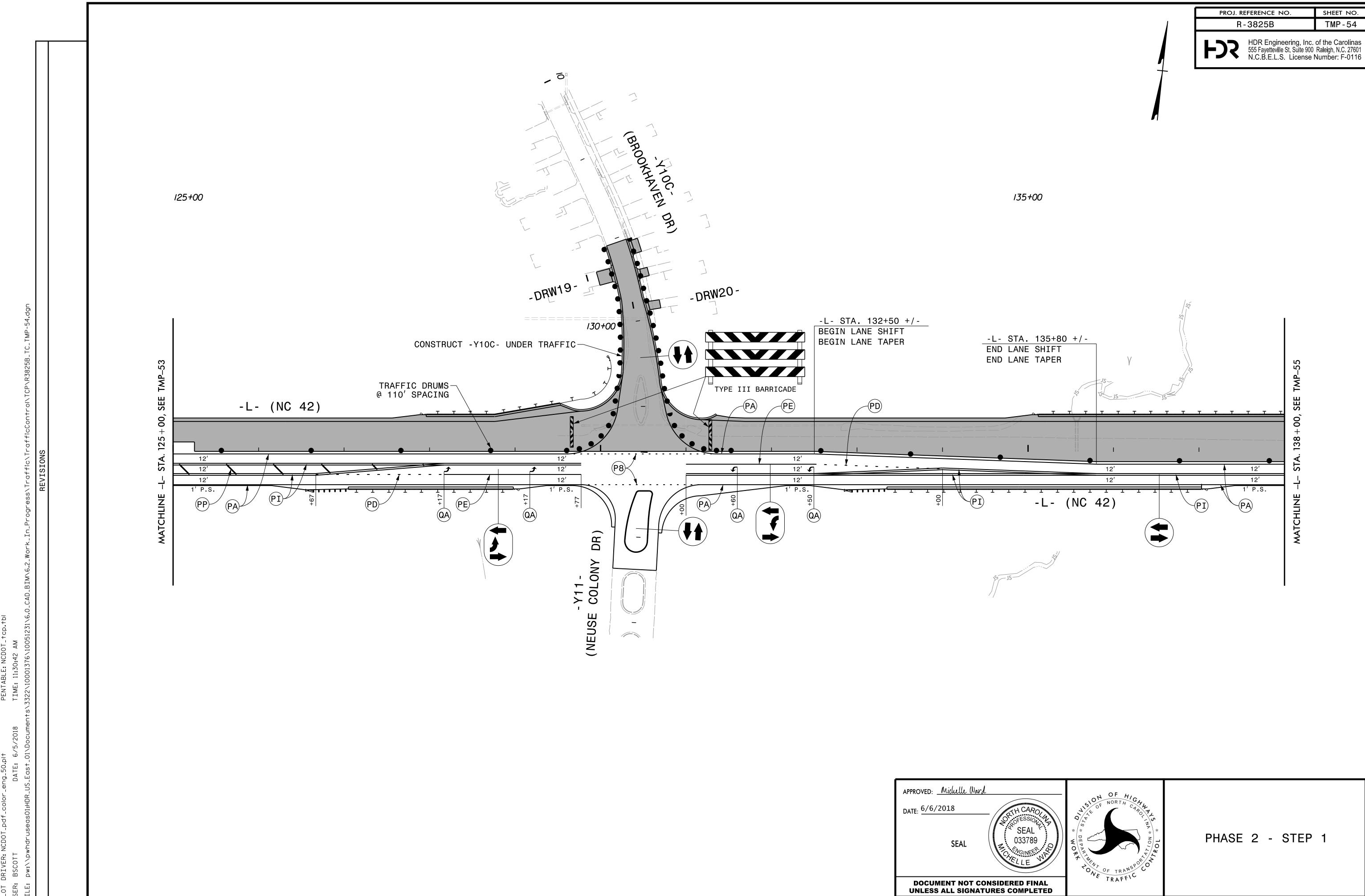
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M6–1 21" X 15"

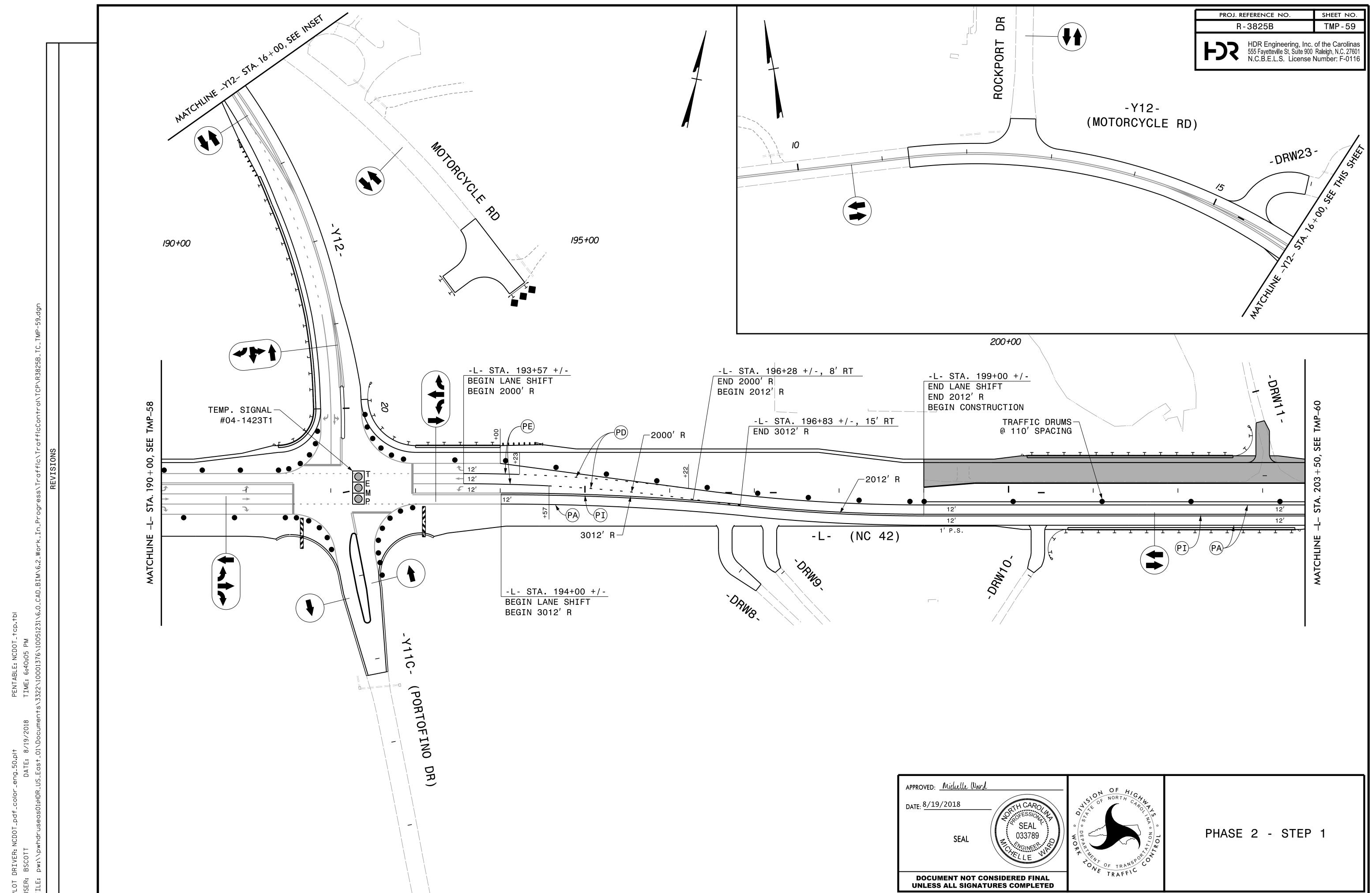


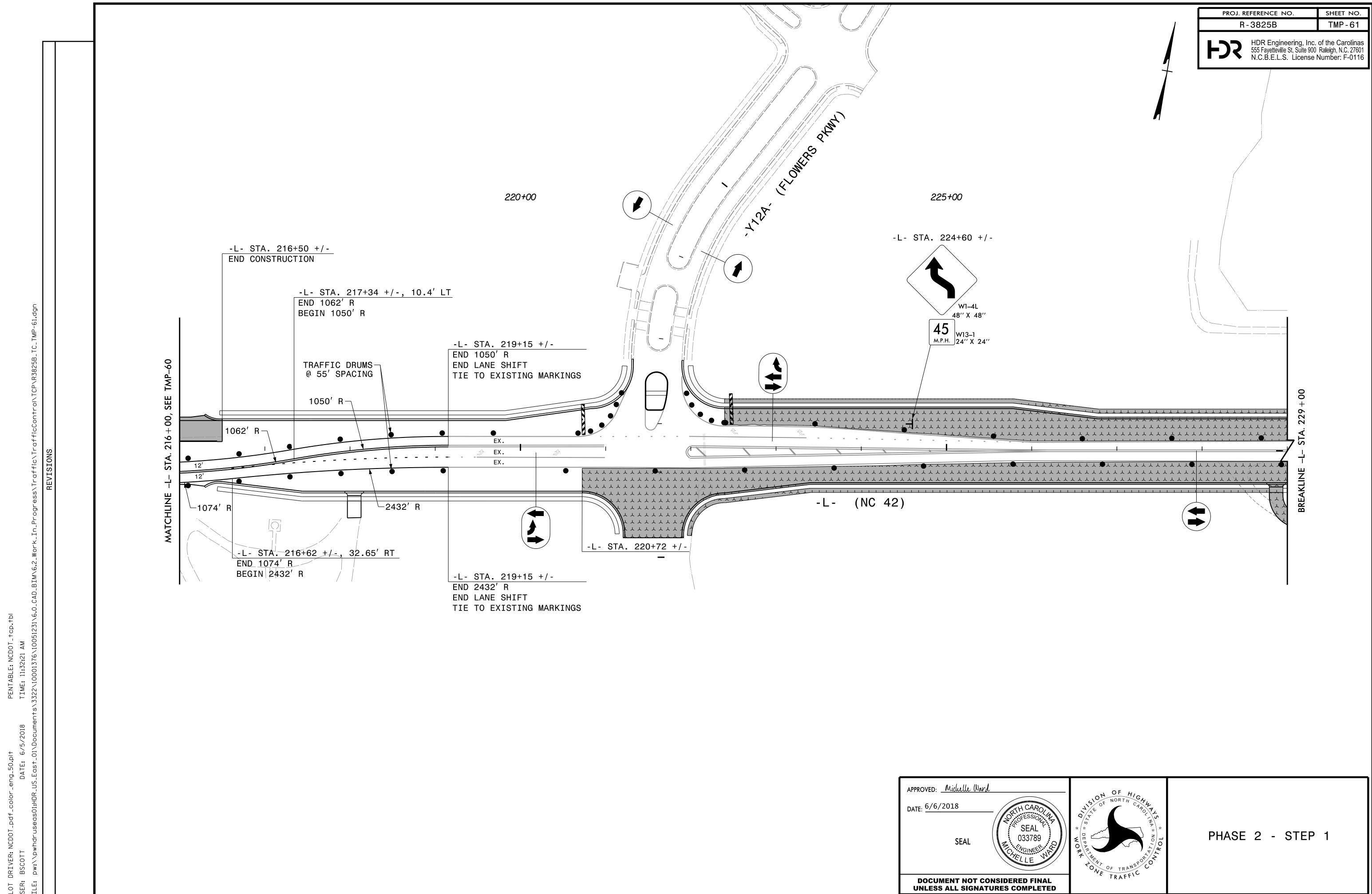
PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-42 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 *50+00* 50+00 -L- STA. 50+88 +/--L- STA. 50+00 +/-BEGIN CONSTRUCTION TIE TO EXISTING MARKINGS BEGIN TEMPORARY PAVEMENT TYPE III BARRICADE TYPE III BARRICADE -L- STA. 52+20 +/--CONSTRUCT TEMPORARY TIE -L- (NC 42) -L- (NC 42) **▼** EX. EX. ▼ -L- STA. 52+20 +/--L- STA. 49+75 +/-END CONSTRUCTION BEGIN CONSTRUCTION END TEMPORARY PAVEMENT -L- STA. 50+88 +/-END CONSTRUCTION TYPE III BARRICADE -CONSTRUCT - DRW17 -REMOVE TEMPORARY-ALIGNMENT -Y5DET--Y5- STA. 14+22 +/-END CONSTRUCTION TYPE III BARRICADE TYPE III BARRICADE APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 1 - STEP 2A DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

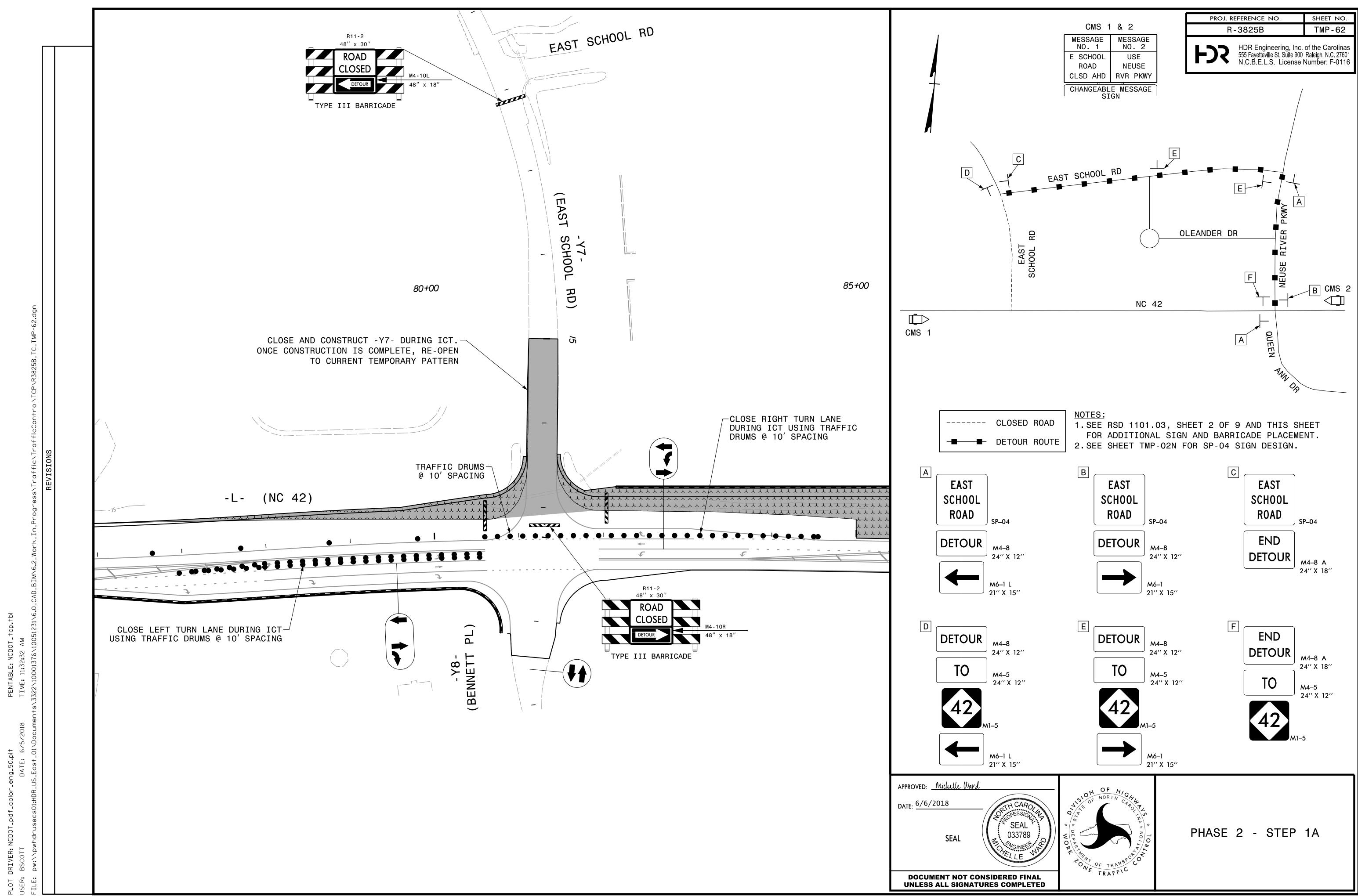




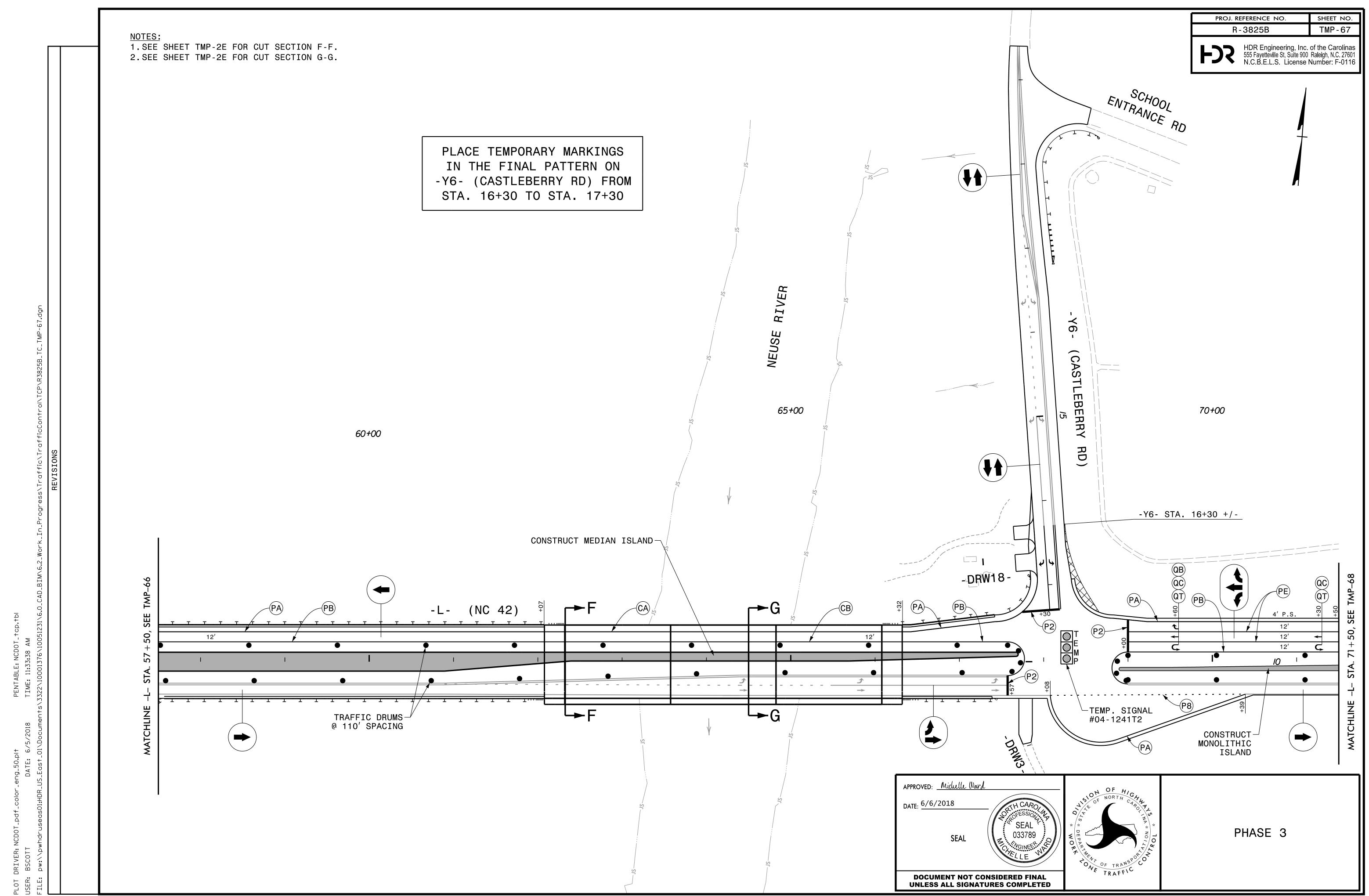
PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-56 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 *155+00* 160+00 \_-L- STA. 163+30 +/-TRAFFIC DRUMS
@ 110' SPACING BEGIN PCB, 2' OFFSET -L- STA. 153+22 +/-BEGIN CONSTRUCTION PLACE CRASH CUSHION TYPE III BARRICADE -L- (NC 42) 12′ 12′ 12′ 12′ 1' P.S. В UCCHERO -DRW7 -L- STA. 153+22 +/-END LANE SHIFT PENTABLE: NCDOT\_+cp.+bl TIME: 11:31:09 AM +s\3322\10001376\10051231\6.0\_CAD\_BIM\ Z --L- STA. 151+72 +/-BEGIN LANE SHIFT APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 2 - STEP 1 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED







PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-62C HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 -Y12-(MOTORCYCLE RD) 195+00 190+00 200+00 -L- STA. 199+00 +/-END LANE SHIFT -L- STA. 195+70 +/-BEGIN LANE SHIFT TIE TO EXISTING MARKINGS TEMP. SIGNAL — #04-1423T2 -L- (NC 42) 12' M 12' 12′ 1' P.S. (PORTOFINO DR) APPROVED: Michelle Ward DATE: 8/19/2018 PHASE 2 - STEP 2 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-71 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 120+00 125+00 115+00 -Y10B-TRILLIUM CONSTRUCT MEDIAN — ISLAND TRAFFIC DRUMS— @ 110' SPACING TYPE III BARRICADE (NC 42) 12′ 12′ THE STATE OF THE S CONSTRUCT MEDIAN-ISLAND CONSTRUCT MONOLITHIC ISLANDS TRAFFIC DRUMS
@ 110' SPACING PENTABLE: NCDOT\_+cp.+bl TIME: 11:34:18 AM -s\3322\10001376\10051231\6.0\_CAD\_BIM\ APPROVED: Midulle Ward DATE: 6/6/2018 PHASE 3 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-72 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 135+00 125+00 TYPE III BARRICADE -CONSTRUCT MONOLITHIC ISLANDS CONSTRUCT — MONOLITHIC ISLAND TRAFFIC DRUMS
@ 110' SPACING 12′ 12′ Tire. -CONSTRUCT MONOLITHIC ISLAND TRAFFIC DRUMS— @ 110' SPACING -L- STA. 135+23 +/-BEGIN LANE TAPER
TIE TO EXISTING MARKINGS TYPE III BARRICADE APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 3 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

140+00

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-73 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

150+00

145+00

ALTERNATE ISLAND CONSTRUCTION TO MAINTAIN U-TURN ACCESS. U-TURN SHALL REMAIN OPEN AT ALL TIMES. TRAFFIC DRUMS— @ 110' SPACING TRAFFIC DRUMS
@ 55' SPACING 4' P.S. 12′ 12′ PA (NC 42) TRAFFIC DRUMS @ 55' SPACING CONSTRUCT MEDIAN— ISLAND -DRW6-

> APPROVED: Midulle Ward DATE: 6/6/2018 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

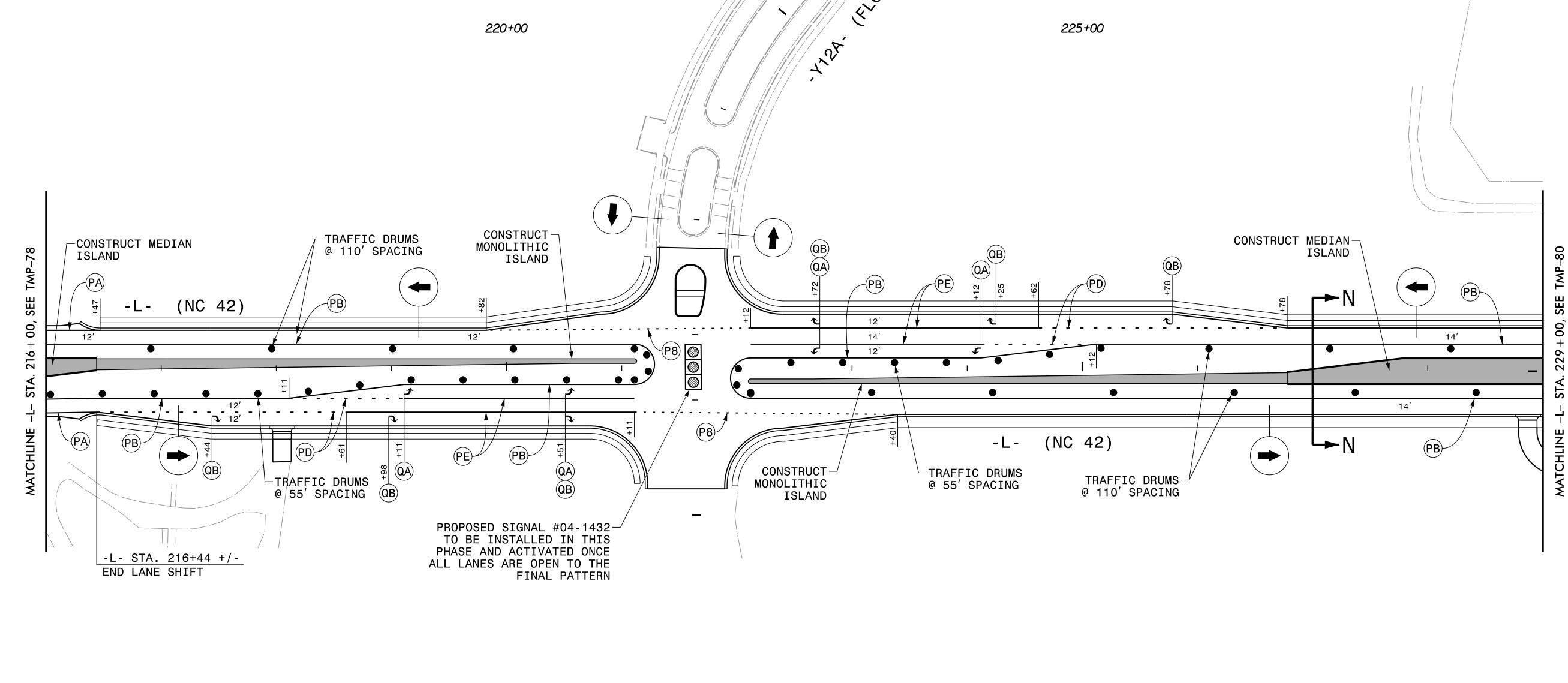
PHASE 3

PENTABLE: NCDOT\_tcp.tbl TIME: 11:34:39 AM ts\3322\10001376\10051231\6.0\_CAD\_BIM\6.2\_

PROJ. REFERENCE NO. SHEET NO. R-3825B TMP-74 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 *155+00* 160+00 TRAFFIC DRUMS— @ 110' SPACING CONSTRUCT MEDIAN — ISLAND -L- (NC 42) 4' P.S. 12′ 12′ TRAFFIC DRUMS $^{-\!\!/}$  @ 110 $^{\prime}$  SPACING **BUCCHERO** -DRW7 PENTABLE: NCDOT\_+cp.+bl TIME: 11:34:49 AM -s\3322\10001376\10051231\6.0\_CAD\_BIM\6.2\_ Z APPROVED: Midulle Ward DATE: 6/6/2018 PHASE 3 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO. SHEET NO. DR R-3825B TMP-77 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 ROCKPORT -Y12-(MOTORCYCLE RD) 195+00 190+00 200+00 -DRW1 TRAFFIC DRUMS-@ 110' SPACING CONSTRUCT MEDIAN ISLAND (NC 42) 12′ 12′ **← ₹** MATCHLINE TRAFFIC DRUMS— @ 110' SPACING TEMP. SIGNAL — #04-1423T3 -CONSTRUCT MONOLITHIC ISLAND -CONSTRUCT MONOLITHIC ISLAND PENTABLE: NCDOT\_tcp.tbl TIME: 11:35:21 AM ents\3322\10001376\10051231\6.0 (PORTOFINO DR) APPROVED: Michelle Ward DATE: 6/6/2018 PHASE 3 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PENTABLE: NCDOT\_tcp.tbl TIME: 11:35:44 AM ts\3322\10001376\10051231\6.0\_CAD\_BIM\



APPROVED: Michelle Ward DATE: 6/6/2018 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES: 1.SEE SHEET TMP-2J FOR CUT SECTION N-N.

PHASE 3

